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# FM 7-30

:NT OF THE ARMY FIELD MANUAL

# INFANTRY, AIRBORNE, AND MECHANIZED DIVISION BRIGADES

HEADQUARTERS, DEPARTMENT OF THE ARMY
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# INFANTRY, AIRBORNE, AND MECHANIZED DIVISION BRIGADES


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# CHAPTER 1

# GENERAL

## Section I. PURPOSE AND SCOPE

### 1. Purpose

This manual provides doctrinal guidance on organization and employment of the infantry, airborne, and mechanized division brigade.

### 2. Scope

*a.* The doctrine herein is applicable generally to all three types of brigades. The portions of the text which pertain exclusively to one type brigade are so specified. This doctrine, with appropriate adjustments for minor organizational differences, also pertains to the separate brigade when organized for combat with a preponderance of infantry, mechanized infantry, or airborne infantry battalions.

*b.* This manual is a brigade-level manual; however, the fundamentals of tactical operations of the Army division generally apply to the brigade.

*c.* Operations under all pertinent conditions of warfare for the brigade are included. The basic material applies to nuclear and nonnuclear warfare and counterinsurgency operations. The manual is designed for use in conjunction with other manuals and training texts (app. I).

*d.* For brevity, brigades will be referred to as the infantry, airborne, and/or mechanized brigades.

*e.* Users of this manual are encouraged to submit recommended changes or comments to improve the manual. Comments should be keyed to the specific page, paragraph, and line of text in which change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be forwarded direct to the Commanding Officer, U.S. Army Combat Developments Command Infantry Agency, Fort Benning, Georgia 31905.

## Section II. MISSIONS AND ROLES OF THE INFANTRY, AIRBORNE, AND MECHANIZED DIVISION BRIGADES

### 3. Mission

*a. The Brigade.* The basic combat mission of the brigade is to close with the enemy by means of fire and maneuver in order to destroy or capture him, or to repel his assault by fire, close combat, and counterattack. As a major subordinate command element within the divisions, the brigade, with attached maneuver, combat support, and combat service support units, executes the division's combat mission.

*b. The Brigade Headquarters and Headquarters Company.* The mission of the brigade headquarters and headquarters company is to provide command and control facilities and limited Army aviation support for employment of attached and supporting elements. The organization of the brigade headquarters and headquarters companies of the infantry, airborne, and mechanized brigades is the same except for minor differences in equipment and personnel.

### 4. Roles

In addition to its basic combat mission, the brigade may be employed to—

*a.* Supervise the training of all elements attached to the brigade.

*b.* Participate independently or as part of a division in stability operations.

## Section III. ORGANIZATION

### 5. General Characteristics

*a.* The brigade has no assigned units other than the brigade headquarters and headquarters company. Maneuver units (infantry, airborne infantry, mechanized infantry, and tank battalions) are normally attached to the brigade for operations. Combat support units may be attached to or placed in support of the brigade, depending on the circumstances of employment. In most situations, they are placed in support; however, when the brigade is organized for independent or semi-independent operations, combat support units are usually attached. Combat service support units are normally placed in support of the brigade.

*b.* Attachments to and detachments from the brigade are made by division to provide the brigade the means to accomplish assigned missions. In rapidly moving situations, changes in the

organizational structure of the brigade may be made frequently and on short notice. The brigade commander and his staff develop SOP and operational techniques which permit attachments and detachments to be made expeditiously and efficiently.

## 6. Implementation

*a. Authority.* The brigade organization is established and modified by division orders. Changes in task organization during operations are frequently made by fragmentary and/or oral orders.

*b. Duration and Conditions of Employment.* Whenever possible, the order attaching or placing a unit in support will specify the anticipated duration of the attachment; any limitations on or conditions of employment of the unit should be clearly specified.

*c. Timing.* Changes in task organizations must be carefully planned and timed to avoid unnecessary interference with combat operations. Detachment of a unit should not be made while it is engaged with the enemy or under conditions where its withdrawal would seriously jeopardize the accomplishment of the mission of the unit to which it is attached. Whenever possible, major changes in the organization of a unit should be made while it is in reserve or during a lull in activities.

*d. Administration.* When attached or placed in support, units report ready to fight or to perform their support mission. This includes having the prescribed basic load of ammunition, other supplies as required, and equipment and weapons in operable condition.

*e. Coordination.* The commander of an attached or supporting unit, or his representative, should immediately report to the headquarters of the supported unit for necessary orders and coordination. After reporting to the commander, he should contact appropriate staff sections for additional guidance and instructions and to arrange for combat service support which may be required.

*f. Communication.* In making attachments or assigning support missions, consideration must be given to communications. Radios of the attached or supporting unit must be able to operate in the nets of the supported units or arrangements made to provide radios which can accomplish this.

## 7. Factors Bearing on Organization for Combat

*a.* Organization for combat is based upon an established requirement. The adopted command relationship is guided by consideration for the most effective employment. Attachment represents the firmest control but may fail to fully use the attached element and impose an additional administrative burden on the

element to which it is attached. Operational control provides a relationship where full use of the attached element is devoted to the major element to which it is attached without the burden of additional combat service support. The role of support makes the element generally available but does not strictly limit the application of its resources to a single force. Generally, the role of attachment is preferred when the commander designating this status is unable to otherwise provide effective control and afford combat service support. Operational control is preferred when outside resources are available for combat service support and effective control can be maintained. The supporting role is preferred when effective control can be exercised by the commander assigned the mission.

*b.* When conditions permit, subordinate units may be formed into task forces for employment either as a temporary grouping of units (under one commander) formed to carry out a specific operation or mission, or a semipermanent organization of units (under one commander) formed to carry out a continuing specific task.

*c. Tactical Versus Administrative Roles.*

(1) The division brigade is basically a tactical echelon of command. The brigade commander or his designated representative enters the administrative chain of command in a control, coordinating, and supervisory role only. Maneuver and combat support units attached to the brigade receive combat service support directly from the division support command, although units of the support command may be attached to, or placed in support of, the brigade for this purpose. Whenever the division brigade is employed in a separate or independent role, necessary combat support and combat service support elements are normally attached.

(2) The nondivisional (separate) brigade is designated on a relatively more permanent basis. Whether such a brigade consists basically of organic maneuver battalions only or includes also other organic combat support and combat service support units depends upon its mission, intended strength, and proximity of required support. In these events, the brigade commander and staff become responsible for combat service support operations for all assigned or attached units.

## Section IV. CAPABILITIES AND LIMITATIONS

### 8. General

*a.* The capabilities and limitations of the brigade are determined by the type and number of maneuver battalions and combat support and combat service support units attached to or in support of it. The brigade is a flexible organization, tailored to best accomplish a particular mission. Its capabilities and limitations are established by division.

*b.* All three types of brigade headquarters have the following capabilities regardless of the type and number of units attached to or in support of it:

(1) Command and control up to five maneuver battalions plus those elements which are required for combat support and combat service support in combat operations.
(2) Accept or release assigned, attached, or supporting elements on short notice.
(3) Conduct brigade operations on a sustained, 24-hour basis.
(4) Supervise the movement and security of attached or supporting elements.
(5) Supervise tactical training of attached elements.
(6) Act as an alternate operational headquarters for the division.
(7) Establish liaison with higher and adjacent headquarters.

### 9. Infantry Brigade

The organization of an infantry brigade provides a capability to—

*a.* Close with and destroy or capture the enemy by means of fire and maneuver.

*b.* Conduct ground offensive and defensive operations under all conditions of weather and terrain, with or without nuclear support.

*c.* Seize and hold terrain.

*d.* Conduct airmobile operations when provided adequate aircraft.

*e.* Conduct independent and semi-independent operations when appropriately reinforced.

*f.* Conduct counterguerrilla operations.

*g.* Conduct infiltration operations.

*h.* Participate in joint amphibious and joint airborne operations.

*i.* Exploit the effects of nuclear, chemical, and biological weapons with maneuver and firepower.

*j.* Provide limited defense against air attack.

## 10. Mechanized Brigade

In addition to the capabilities listed in paragraph 9, the organization of a mechanized brigade provides a capability to—

*a.* Maneuver with a high degree of cross-country mobility, coupled with light armor protection for infantry.

*b.* Exploit the effects of nuclear, chemical and biological weapons with emphasis on speed and with a degree of protection against the effects of radiation.

*c.* Provide a highly mobile penetration, exploitation, and pursuit force.

*d.* Act as a mobile counterattack force for the division.

*e.* Traverse inland waterways within limitation while mounted.

## 11. Airborne Brigade

In addition to the capabilities listed in paragraph 9, the airborne brigade is capable of conducting frequent parachute or airlanded assaults with minimum marshaling and planning procedures, and it can operate with somewhat reduced logistical support.

## 12. Limitations

*a.* The infantry and airborne brigades have ground mobility limited to walking speed and have limited armor protection.

*b.* The mechanized brigade loses its mechanized capabilities when it engages in airmobile and/or joint airborne operations. Its ground mobility is restricted by jungle, mountain, and other difficult terrain. The capability of carriers to cross water obstacles is limited by steep banks or water currents. The mechanized brigade's logistical requirements are greater than those of the infantry or airborne brigade.

*c.* The mobility of tank units attached to all three type brigades may be restricted by terrain obstacles.

## 13. Independent and Semi-Independent Brigades

In addition to the capabilities listed in paragraphs 9 through 11, infantry, airborne, and mechanized brigades which are appropriately reinforced for independent and semi-independent employment have the capability of sustaining themselves in combat for extended periods of time when supported logistically by field army installations.

## 14. Mobility

*a. Air.* The headquarters and headquarters companies of all three type brigades can be airlanded.

*b. Ground.*

(1) All personnel and equipment of the headquarters and headquarters companies of all three type brigades can be transported in one move, using organic transportation.

(2) The ground mobility of the brigade when organized for combat is governed by the tactical ground transport organic to its attached maneuver battalions.

## 15. Communications

*a.* An effective communications system, responsive to the momentum of brigade operations, is essential. The brigade communication system, when properly established, provides the commander with the capability to control the actions of his unit; to coordinate his supporting fires; to receive and transmit orders and information; to maintain contact with higher, lower, attached, supporting, and adjacent units and to coordinate logistical and personnel matters (fig. 1).

*b.* Radio is the principal means of communication within the brigade. Properly controlled, the authorized tactical radios can carry a larger volume of traffic. Range is extended when required by use of antenna equipment and radio relay. Radio is susceptible, however, to jamming and interception by the enemy and to terrain and atmospheric conditions according to types of equipment. Therefore, wire and messenger (both ground and air) are used extensively whenever the tactical situation allows. Reliance is not placed on any one system; rather, each means complements the other, thus achieving maximum reliability, security, flexibility and responsiveness from the available communication means (para 16).

| Units | Brigade Command Net (FM) Voice | Brigade Logistics Net (FM) Voice[2] | Brigade RATT Net Operations Intelligence Net [3] | Division Command Net (FM) Voice[4] | Division Warning Net (AM) Voice | Division RATT Net Operations Intelligence | Division RATT Net Admin Logistics | Air Force Air Req Net (AM) Voice |
|---|---|---|---|---|---|---|---|---|
| Brigade CP | X[5] | X | X[5] | X | X | X | | X |
| Brigade Trains | X | X[5] | | | | | X | |
| Maneuver Bn | X | X | X | | X | | | X |
| Engineer Bn | X[1] | X[1] | | X | X | | | |
| Cavalry Sqd | X[1] | X[1] | | X | X | X | X | X |
| Division Main | | | | X[5] | X[5] | X[5] | X | X |
| Division Arty | X[1] | X[1] | | X | X | X | X | |
| Support Command | | X[1] | | X | X | | X[5] | |

[1] Unit supporting brigade enters brigade nets as required.

[2] Brigade logistic net established as required. Used to establish communication in brigade trains as reqquired.

[3] May be used for other type traffic as required.

[4] Other nets may be established as required, e.g., brigade intelligence net (FM) voice. Equipment for this net would be obtained by reducing stations in brigade command net and with similar adjustment at battalion.

[5] NCS—net control station.

*Figure 1. Brigade communication.*

# CHAPTER 2

# BRIGADE HEADQUARTERS AND HEADQUARTERS COMPANY

## Section I. ORGANIZATION

### 16. Headquarters and Headquarters Company

The brigade headquarters (fig. 2) is organized to provide command and control for the training and employment of attached units. The brigade headquarters company provides personnel and equipment to operate and support the brigade headquarters.

*a. Organization.* The organization of the three types of brigade headquarters and headquarters company is basically the same. Minor variations in organization and equipment reflect the characteristics of the type brigade.

*b. Brigade Headquarters and Staff.* The brigade headquarters section consists of the brigade commander, the executive officer, and other unit staff officers, the special staff officers, and the sergeant major (fig. 3). The staff section contains the officer assistants to the unit staff and the personnel and equipment required for operation by the staff sections in the command post and the brigade trains. Each staff section has its own vehicles, communication personnel, and equipment. The headquarters is organized to operate on a 24-hour basis.

(1) *Brigade commander.*

(*a*) The brigade commander exercises command over the elements attached to his brigade. The attached maneuver battalion commanders are his principal subordinates, and his contact with them is direct. The brigade commander, as one of the principal commanders of the division, operates directly under the division commander and has access to him at all times.

(*b*) The brigade commander has overall responsibility for the command and control of his brigade in training and in combat. The flexible organizational characteristics of the brigade demand that the commander have complete knowledge and understanding of combined-arms operations.

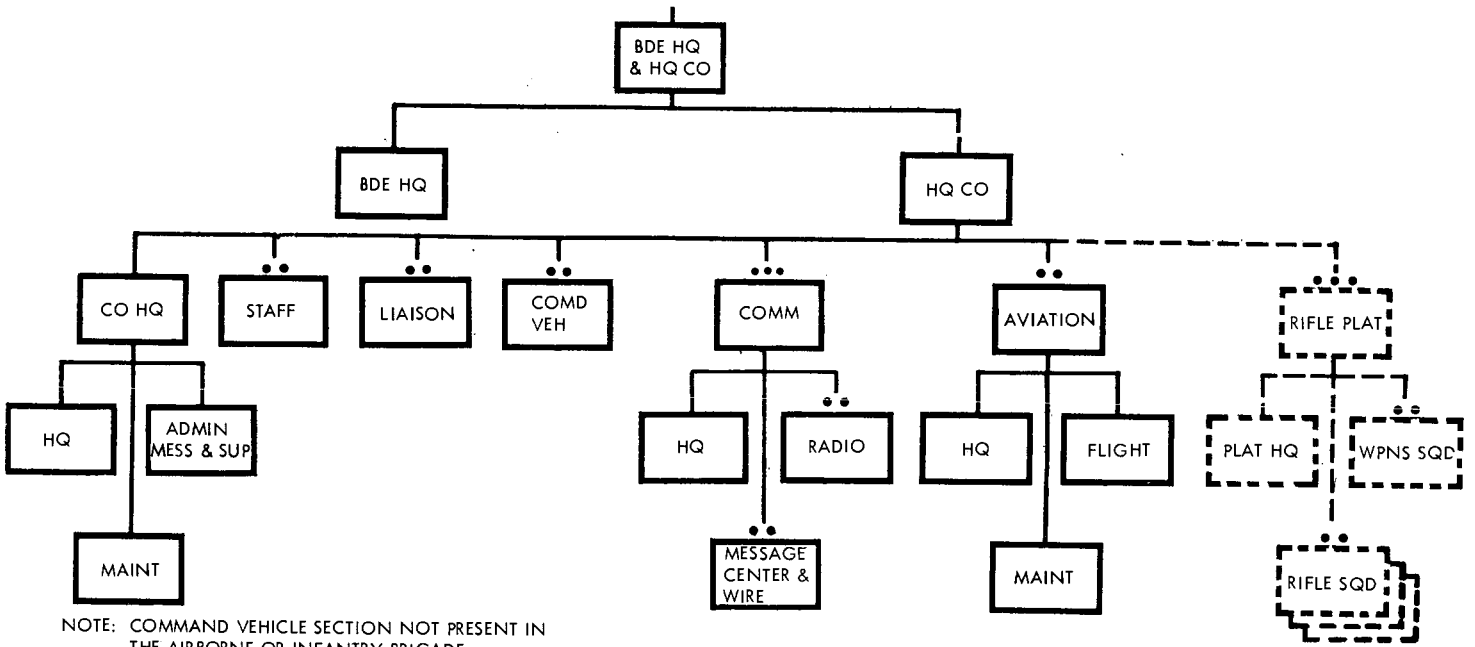



*Figure 2. Brigade headquarters and headquarters company.*

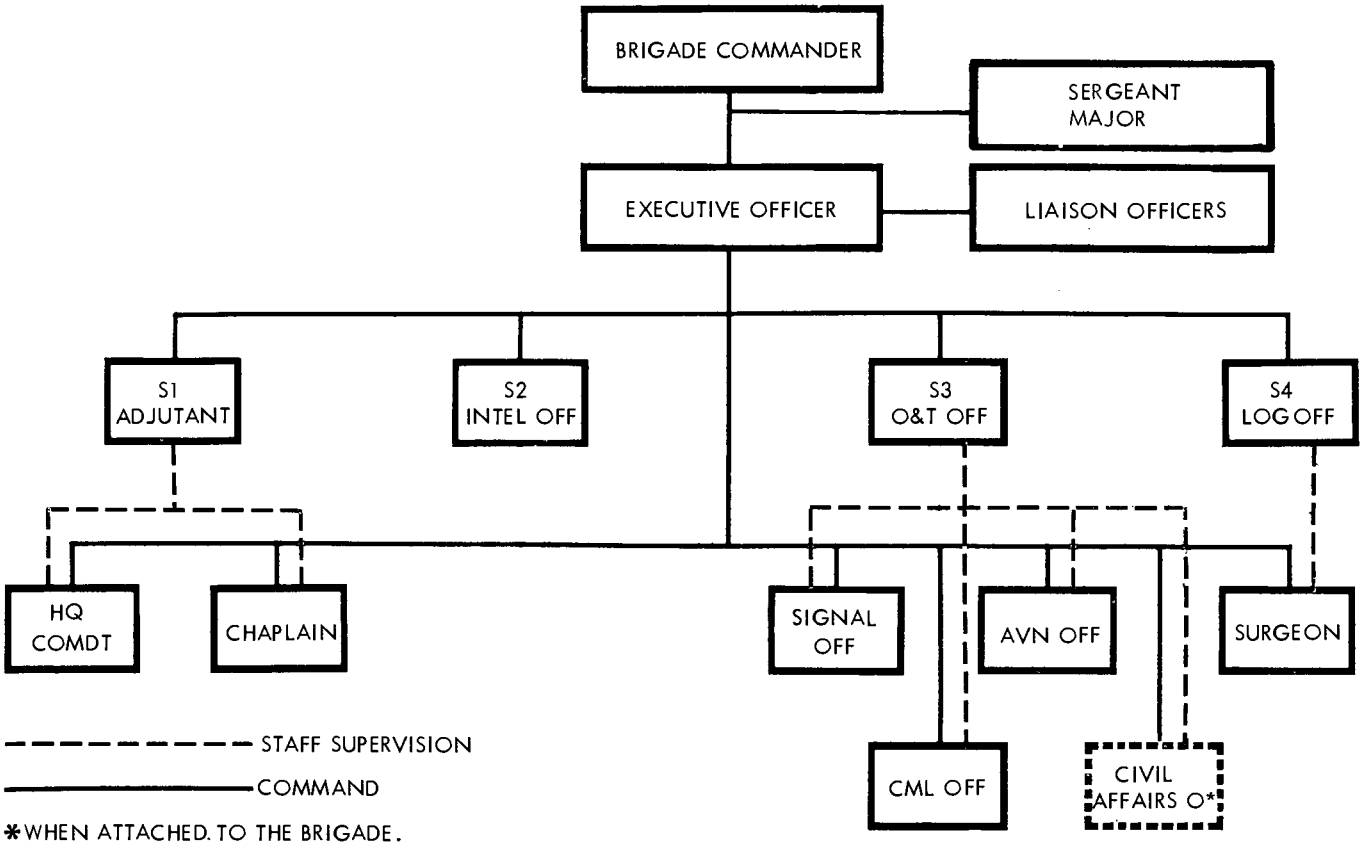



*Figure 3. The brigade staff.*

(*c*) He must make timely and adequate decisions and is capable of operating with mission-type orders from higher headquarters which require exercise of initiative and professional judgment in execution. In turn, he provides his subordinate commanders with adequate guidance for their operations and allows them freedom of action in implementing his orders. He must be alert to exploit the opportunities for decisive results which arise in combat, and he possesses confidence derived from careful and thorough plans and risk evaluation. Once he elects a course of action, the brigade commander pursues it vigorously and aggressively and inspires his staff, his subordinate commanders, and his troops to do likewise.

(*d*) In stability operations involving deployment of his brigade in oversea areas, the commander must have a thorough understanding of the people with whom he deals, and the ability to adapt his concepts and thinking to the political and other limitations which may be imposed on the use of his force.

(2) *Executive officer.* The brigade executive officer is the principal assistant and advisor to the brigade commander. His functions and responsibilities are similar to those of a chief of staff. He exercises supervision over the operations of the brigade staff and represents and acts for the brigade commander during the temporary absence of the latter. He is prepared to assume command of the brigade at any time. The executive officer is normally located at the brigade command post. He and the commander should not be absent from the command post at the same time. When the command post is displaced, the executive officer usually moves with the main echelon.

(3) *Adjutant (S1).* The duties of the brigade S1 correspond to those of the G1 (FM 101–5). He has unit staff responsibility for personnel activities and other administrative matters not assigned to another staff officer. He may, when the need arises, perform the functions of those special staff officers in the personnel and administrative field found at higher staff levels but who are not included in the brigade staff. These include the inspector general, staff judge advocate, provost marshal, special services officer, and finance officer. He is assisted by the personnel staff noncommissioned officer. The S1 does not enter the personnel and administrative channels between the divi-

sion administration company and attached units except for policy matters. Units attached to the brigade normally communicate directly with the division adjutant general section. The S1 has staff responsibility for the movement, internal arrangement, organization, and operation of the headquarters and the allocation of shelter within the brigade headquarters. His principal assistant for this function is the headquarters commandant.

(4) *Intelligence officer (S2).* The duties of the brigade S2 are similar to those prescribed for the G2 in FM 101–5. He has staff responsibility for matters pertaining to combat intelligence and counterintelligence. He coordinates surveillance and reconnaissance activities of attached units. He is authorized an assistant S2 (S2 Air).

(5) *Operations and training officer (S3).* The brigade S3 has staff responsibility for all matters pertaining to the organization, training, and combat operations of the brigade. His duties correspond generally to those prescribed for the G3 in FM 101–5. He exercises staff supervision over aviation, CBR, civil affairs, psychological warfare, and signal matters. He supervises the brigade tactical operation center. He has staff responsibility for the overall security of the command, including the rear area. He is authorized two captains as assistant S3 and S3 Air. In the combined intelligence-operation section, the S2 and S3 work as a team, with each being qualified to take full charge of both activities during the absence of the other.

(6) *Logistics officer (S4).* The S4 has staff responsibility for logistics. He primarily is a planner and an advisor to the brigade commander; he operates in the division logistical support system only when requested or when deemed necessary to insure that the desired support is being provided to the attached units. The S4 does not become involved directly in preparing or processing supply requisitions or the distribution of supplies for units attached to the brigade except when the brigade is on an independent mission, a class IV item is requested by an attached unit, or when aerial delivery of supplies is required. He selects the general location of the brigade trains area and has staff responsibility for the operations, security and displacement of the trains as required to support tactical operations. He exercises staff supervision over the activities of the brigade surgeon. He also

is responsible for area damage control planning and for the integration of the area damage control plan with that of the division. He is authorized an assistant S4, and a food service technician who normally are located in the brigade trains area during tactical operations.

(7) *Chaplain.* The brigade chaplain is the senior chaplain assigned to the brigade headquarters and headquarters company. He functions under the staff supervision of the S1. The chaplains of the section provide religious services and pastoral care for all units or elements assigned or attached to the brigade. The brigade chaplains will coordinate their activities and provide assistance and supervision necessary to insure adequate religious coverage of all organic or attached units.

(8) *Chemical officer.* The brigade chemical officer is the advisor to the commander and his staff on planning and coordinating chemical, biological, and radiological (CBR) operations and defense. In coordination with appropriate unit staff officers, the chemical officer supervises the CBR operations and training activities of subordinate units.

(9) *Signal officer.* The brigade signal officer is the principal advisor to the brigade commander and staff in all communication matters. He coordinates and exercises technical supervision over the training and activities of the communication personnel in the brigade headquarters and headquarters company and attached units and exercises operational control over the brigade communication platoon. He keeps informed of current and planned activities of the brigade. Under the staff supervision of the S3, the signal officer plans and recommends employment of all communications-electronic means in the brigade. He is normally a member of the brigade quartering party.

(10) *Surgeon.* The brigade surgeon advises the commander on all matters affecting the mental and physical health of the command. He effects liaison with the medical company in support of the brigade. The surgeon normally exercises operational control of medical units attached from division or higher level. Overall medical activities are coordinated by the brigade S4. However, the surgeon deals directly with the brigade commander on medical matters affecting the health of the brigade

and with the entire brigade staff in their respective areas of responsibility.

(11) *Sergeant major.* The sergeant major is the senior NCO in the brigade headquarters. He acts in the name of the commander when dealing with other NCO in the brigade and is the commander's NCO advisor. He may assist the S1 in administrative matters. He establishes liaison with the sergeants major and personnel staff NCO of the attached battalions and assists them in administrative matters.

*c. Company Headquarters.* The company headuarters is composed of the personnel and equipment required for support of the brigade headquarters and headquarters company. It includes the company commander (who is also the headquarters commandant), company executive officer, first sergeant, company clerk, mess steward, motor sergeant, supply sergeant, armorer, powerman, mechanics, cooks, and drivers.

*d. Liaison Section.* The duties of the liaison officers correspond to those of the division liaison officer. The section operates under the supervision of the brigade executive officer or S3. One liaison officer maintains liaison with division headquarters, and one may be assigned to an adjacent brigade. When not engaged in liaison duties, the liaison officers may be assigned duties in the brigade S3 section.

*e. Command Vehicle Section.* The command vehicle section provides track vehicles with operators and equipment for use as command vehicles by the brigade commander and staff. It is organic to the mechanized brigade.

. *Communication Platoon.*

(1) The communication platoon in all three types of brigades is organized with a platoon headquarters, a message center and wire section, and a radio section. Personnel and equipment vary slightly with each brigade, generally in number and types of vehicles, radios, and drivers. The platoon provides personnel and equipment to install, operate, and maintain communication within the headquarters and provides access to the division communication systems. The platoon performs organizational maintenance on signal equipment of the headquarters and headquarters company.

(2) The platoon establishes and maintains communication between units, governed by the following rules:

(*a*) The brigade is responsible for establishing and maintaining communication with the subordinate units (including attached units).

(*b*) A unit supporting a brigade is responsible for establishing and maintaining communication with the brigade.

(*c*) The rule for establishing lateral communication from left to right is applicable for subordinate units of the brigade.

*g. Aviation Section.*

(1) The aviation section provides light observation helicopters for command, control, liaison, reconnaissance, and security within the brigade. The commander of the section also serves as the brigade aviation officer, advising the commander on all matters pertaining to Army aviation support. In the absence of a USAF liaison officer, he may also furnish advice on aviation and air support in general. He coordinates all aviation in support of the brigade.

(2) The principle governing employment of the aviation section is that the organic aircraft will be employed in the performance of those aviation tasks which the brigade commander deems of greatest importance to the successful accomplishment of his mission. Operational missions for the section are assigned by the brigade S3, through the section commander based on priorities and guidance established by the commander. As a matter of high priority, organic aircraft are employed primarily for command and control purposes by the brigade and attached battalion commanders and staffs. Brigade units request Army aviation support through the brigade S3. For details on Army aviation refer to FM's 1–5, 1–15, 1–100 and 57–35.

*h. Augmentation.*

(1) The brigade headquarters and headquarters company may be augmented by the addition of a rifle platoon. The primary function of this platoon is to provide personnel and equipment necessary for the security of the brigade command post. The platoon is under operational control of the headquarters commandant.

(2) Other augmentation may include an information section, maintenance section (mechanized brigade) mess person-

nel, air control team, and other personnel that may be essential for operations, particularly when the brigade is employed in a counterinsurgency role.

## Section II. COMMAND POSTS AND BRIGADE TRAINS

### 17. General

The brigade headquarters and headquarters company is staffed and equipped to organize to operate the main command post, the command group, and the trains command post.

### 18. Brigade Command Post

*a. General.* The main command post is the principal command installation of the brigade. It operates from vehicles to the extent feasible, using organic vans and radio vehicles, and in the mechanized brigade, carriers. It is highly mobile and capable of rapid and frequent displacement. It can operate on a sustained, 24-hour basis. It relies heavily on radio communication. It must have the capability for operation while moving.

*b. Composition.* The following are normally located at, or operate from, the main command post (fig. 4):

(1) Brigade commander.
(2) Brigade executive officer.
(3) Brigade unit staff members with their respective sections, except the S4 section. The S4 may operate from the main command post, but his section is normally located in the brigade trains area.
(4) Brigade special staff.
(5) FSCOORD and representatives of other combat support units.
(6) Company headquarters of the brigade headquarters and headquarters company.
(7) Brigade communication platoon.

*c. Location.* The brigade S3 recommends the general location of the command post after coordination with the signal officer and other appropriate staff officers. The S1, in conjunction with the headquarters commandant and the signal officer, selects the actual site and plans the internal arrangements of command post elements. The primary consideration in command post location is the ability to command and control the brigade. Additional desirable characteristics for the site include:

(1) Optimum conditions for efficient communication.
(2) Proximity to attached combat units and installations for added security.

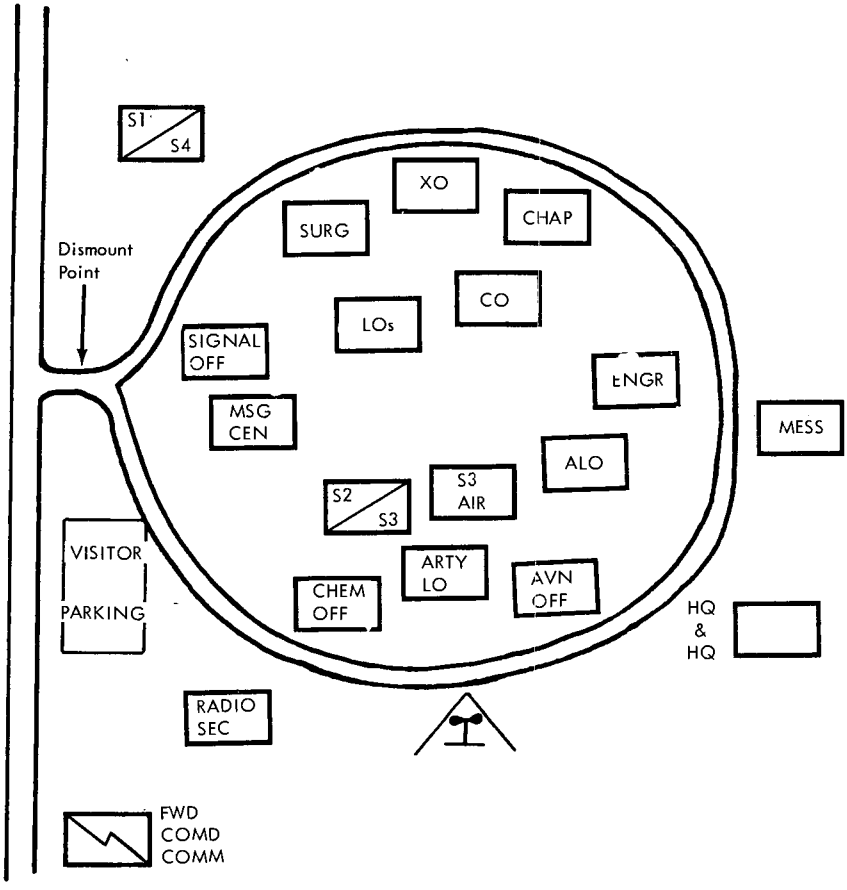



*Figure 4. Organization of brigade command post.*

(3) An area which has sufficient space for the proper dispersion of command post elements.

(4) Sufficient landing space in the vicinity for brigade aircraft.

(5) Adequate concealment, cover, firm and well-drained ground, access roads, and parking area.

(6) Terrain which facilitates both ground and air defense of the command post.

*d. Security.* The S1 has staff responsibility for local security of the command post. The headquarters commandant plans and implements the local command post security plan using command post personnel and the rifle platoon augmentation. Additional security is gained by siting the command post near combat units

of the brigade, by using military police and all other personnel attached to the brigade, and in exceptional circumstances, by using squads or platoons from attached maneuver battalions.

*e. Displacement.* Rapid and efficient displacement of the main command post is accomplished by—

(1) Thorough understanding by all concerned of the brigade SOP for command post displacement.
(2) Effective coordination.
(3) Command post organization to provide two operational groups, one to displace to establish the new command post and the other to continue operation in the old area until the new site is opened. The brigade commander normally moves with the first echelon and the executive officer with the second.
(4) Use of radio and motor messengers to maintain contact with key personnel during the move.

## 19. Brigade Command Group

The brigade commander may elect to operate with a command group in fast-moving situations or when his presence is required forward. The command group may constitute the forward command post during displacement or maintain full operations due to enemy action against the main command post.

## 20. Alternate Command Posts

The size of the brigade headquarters and headquarters company precludes organization of an alternative command post. Normally, the command post of attached maneuver battalions will be designated alternate command posts in predetermined succession.

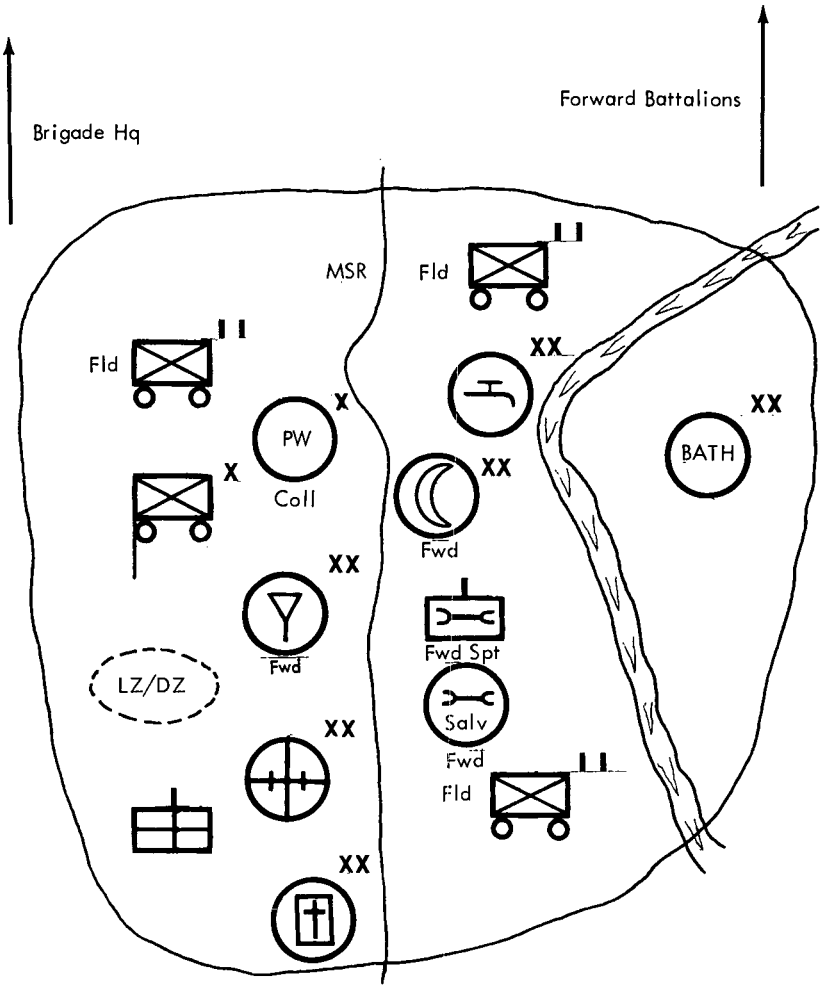
## 21. Brigade Trains

*a. Organization.* The exact composition of the brigade trains will vary in accordance with the tactical situation and the disposition of the tactical units attached to or in support of the brigade. Normally the brigade trains will include (fig. 5)—

(1) Field trains of attached maneuver battalions (may not be in perimeter of brigade trains).
(2) Elements of company headquarters of the brigade headquarters and headquarters company.
(3) Brigade staff section personnel not located with the main command post.
(4) Elements of the aviation section.
(5) Elements from the division support command (para. 45).

(6) Service elements of other units attached to, or in support of, the brigade.

(7) A water point from the division engineer battalion.




NOTE: 1. Not to scale.

2. Forward area signal center normally located in brigade trains area. Exact location determined by division signal officer.

*Figure 5. Organization of brigade trains.*

*b.* The *general* location of the brigade trains is selected by the S4 in coordination with the S3. The *specific* location is selected by the assistant S4.

*c.* The S4 has staff responsibility for the operation, security, and displacement of the brigade trains. Generally, brigade trains displace by echelon.

*d.* To facilitate control the brigade S4 may establish a brigade trains radio/wire net. Stations in this net should include all elements operating from the brigade trains area. This net will be used to assist the S4 in maintaining control while the trains are displacing and to enhance control and security within the brigade trains area. This system may also be used to expedite transactions between support command elements and brigade units.

# CHAPTER 3

# COMBAT SUPPORT AND COMBAT SERVICE SUPPORT

## Section I. GENERAL

### 22. General

Maneuver, combat support, and combat service support units are attached to or placed in support of brigades to provide the means to conduct operations to accomplish the brigade mission. These units are provided by the division or from corps and field army sources.

*a.* Maneuver units which may be attached to the brigade for combat operations or for training include infantry, mechanized infantry, airborne infantry, tank, and armored cavalry. The brigade commander and his staff consider the capabilities and limitations of each type of these units available to the brigade in determining how to organize for combat to achieve the maximum maneuver capability of the brigade (See FM's 7–20, 17–15, and 17–36.)

*b.* Combat support units from the division that may be attached to, placed under operational control of, or placed in support of the brigade include artillery, aviation, engineer, signal, and military police.

*c.* The division support command provides combat service support to the brigade and its attached or supporting units. Elements of the division support command operate in the brigade area to insure rapid response to logistic requirements of brigade units.

*d.* Corps and field army units may also be attached or in support of the brigade. These include artillery (including air defense), aviation, engineers, signal, military intelligence, technical intelligence, army security agency, chemical, transportation, and psychological warfare.

*e.* The brigade will normally receive tactical air support from the Air Force; and Navy gunfire, air, and amphibian support when required.

## Section II. FIRE SUPPORT

### 23. General

*a.* The brigade commander is responsible for the effective employment of all available firepower and maneuver elements under his direct control or in support of his unit, and for the coordination of supporting fires with the plan of maneuver. He integrates the plan of fire support with the scheme of maneuver to insure that each complements and supports the other.

*b.* The most flexible and responsive fire support available to the brigade is furnished by the division artillery battalion normally attached to or placed in direct support of a committed brigade. The fires of this battalion are augmented by other division and corps artillery units, tactical air, and naval gunfire. FM 6–20–1 and FM 6–20–2 contain details of fire support.

### 24. Integration of Nuclear and Nonnuclear Fires

*a.* The brigade commander must insure that nonnuclear fires are completely integrated with the nuclear fires used in his planned operations. He does this whether the nuclear fires are specifically controlled or requested by him or are planned and directed by higher headquarters.

*b.* The capabilities of nuclear and nonnuclear fires must be carefully considered to insure their most effective use. The determination of whether to use nuclear or nonnuclear fires, or both, must take into consideration the mission, characteristics of weapons and targets, and availability of munitions. Nuclear and nonnuclear fires are most effective when employed to complement each other. In addition to other types of nonnuclear fires, the use of quick-acting nonpersistent toxic chemical agents should be considered for attacking selected personnel targets and those in the buffer zone of a nuclear weapon attack. Persistent chemical agents should be considered for use on terrain or targets which are not in the path of friendly attack and which the commander wants to bypass, and/or to restrict the enemy activity.

*c.* Nonnuclear fires may be used to attack close-in targets which escape nuclear fire damage. They may be used in areas of great nuclear fire damage to prevent or delay reorganization or in areas of lesser damage to increase the damage and prevent or delay reorganization. They may be placed to interdict enemy routes of reinforcement and withdrawal. They may also be the sole means employed against a target area. Quick-acting toxic chemical agents are particularly useful in increasing the level of casualties and the area of coverage.

*d.* In planning the integration of fires, the brigade commander must consider the possibility that the planned nuclear fires may not achieve the expected results or that they may become unavailable because of operational or technical conditions. So far as possible, he should plan other courses of action for these eventualities. If the success of the overall operation plan is based on the availability and employment of certain nuclear fires, the brigade commander will have to alter, revise, or perhaps discard the plan entirely if the nuclear fires are not employed. He must be prepared to make these changes rapidly or to make specific recommendations to higher headquarters concerning alternate courses of action.

## 25. Special Nuclear Consideration

*a.* In nuclear warfare, conditions and restriction of employment of nuclear weapons are announced by division and higher headquarters. Within the framework of their operational guidance and existing SOP for nuclear employment, commanders allocated nuclear weapons may employ them on their own initiative. Commanders who have the authority to fire nuclear weapons must consider the tactical advantage that may result from the use of radioactive fallout from surface or subsurface bursts.

*b.* Division normally allocates nuclear weapons to the brigade. In exceptional circumstances, for example, when a battalion task force is operating under division control, an allocation of nuclear weapons may be made directly to a maneuver battalion.

*c.* Nuclear fires, like nonnuclear fires, are classified as planned fires or fires on targets of opportunity. The frequency with which planned fires are used may be limited by the availability of intelligence concerning suitable targets. Targets selected for planned nuclear fires must be kept under constant surveillance to insure necessary adjustment or cancellation of the fires. Planned nuclear fires are included in the fire support plan. Priorities are assigned to planned fires according to their relative importance to the accomplishment of the mission.

*d.* The target analysis and weapon delivery data, exclusive of employment time, are calculated for on-call fires and included in the fire support plan. On-call fires may be planned for areas where the suitable targets are likely to develop, such as possible enemy reserve assembly or known unoccupied defense areas. To the degree possible, plans are made to use all available types of delivery means against on-call targets. Selected on-call targets are assigned relative priorities for the preparation of employment data. It is often possible to obtain on-call nuclear fires within a very short time after they have been requested and approved. Minor changes

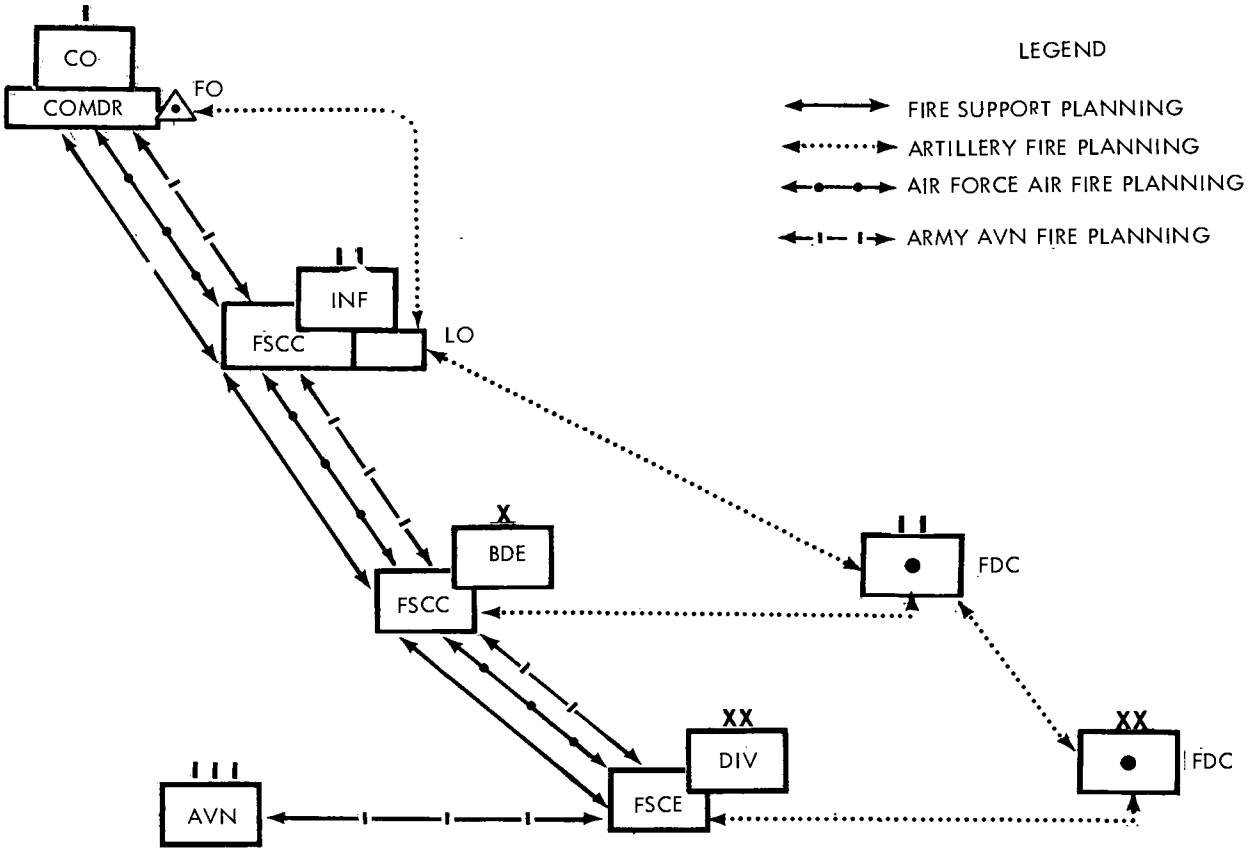



*Figure 6. Division and lower echelon fire planning channels.*

in distance and direction can usually be made with little loss in time, provided the same planned delivery means are used. A change of delivery means and major changes of distance or direction usually cause a considerable delay. Targets engaged under these circumstances should be considered as targets of opportunity.

*e.* Targets of opportunity are analyzed and the employment data calculated as rapidly as possible consistent with the need for accuracy and the time available. Unconfirmed fleeting targets should not be attacked with nuclear fire. In planning nuclear fires on targets of opportunity, the fastest means of delivery consistent with troop safety and the maximum contribution to the accomplishment of the mission should be utilized. Nonnuclear fires may be used to fix fleeting targets until nuclear fires can be employed. Difficulties and delays in attacking targets of opportunity highlight the need for planning on-call fires.

## 26. Selection of Nuclear Weapons

*a.* In determining what nuclear weapons to use, the commander should consider the number, type, and characteristics of the available weapons; available delivery means; extent of damage desired; troop safety requirements; permanence of target; and available means to exploit the effects.

*b.* The number and type of weapons available to the brigade are determined by higher echelons of command. This should not preclude requests for specific weapons not included in such allocations. From the weapons allocated to him, the brigade commander must make best use of available warheads by proper target analysis, selectivity in the choice of targets, and maximum exploitation of the effects of the strikes.

*c.* Army nuclear delivery systems are generally preferred because of their greater accuracy, all-weather capability, and responsiveness to the will of the supported commander. Air delivery, if properly preplanned, permits a fuller use of a nuclear weapon's potential in some situations. Such situations arise when the supported unit is beyond the range of ground delivery units, when enemy action prevents ground units from delivering fire, or when ground delivery means within range of the target are inadequate because of yield or other limitations.

*d.* The extent of damage desired is determined by the commander who plans or requests the fire. To establish the amount of damage desired, he considers his mission, the enemy situation (to include state of combat training and defenses against nuclear weapons), the terrain and weather, and the safety of his troops. His decision constitutes the basis for weapons planning.

*e.* Troop safety is a prime consideration in planning the employment of nuclear weapons. Commanders must determine the safety criteria desired for each nuclear strike and inform the nuclear weapons employment officers and other operational planners during the planning stage.

*f.* The fleeting nature of a target may be the overriding consideration in determining whether a nuclear weapon will be employed against it. Intelligence processes and confirmation reports concerning the target must be expedited to the maximum.

*g.* A linear target is usually less remunerative to a single weapon attack than is a circular target. The use of more than one small-yield nuclear weapon may provide better results than a single weapon attack against a linear target.

*h.* Normally, the height of burst is selected that will cause maximum casualties or damage to the target, consistent with troop safety and limiting requirements.

*i.* To deny the enemy an area (which will not be occupied subsequently by friendly forces), a surface or subsurface burst may be used to contaminate the area with residual radiation when the area of predicted fallout is within the brigade's area of responsibility. This may be particularly useful in areas where routes for movement are few or pass through defiles. Wind velocity and direction with respect to the location of friendly forces are critical to a decision to employ a surface or subsurface burst.

*j.* A nuclear safety line is established in advance for each nuclear weapon or group of nuclear weapons to be employed.

## 27. Chemical Biological Fires

*a.* Authority to fire toxic chemical and biological weapons initially rests with the Army commander. Regardless of the echelon delegated fire authority, the brigade initiates and coordinates planning and recommendations for the integration of these fires with nonnuclear and nuclear fires and with the scheme of maneuver when their use is probable.

*b.* Because of their area coverage effect, toxic chemical and biological agents are particularly suitable against hard, dug-in targets and ill-defined targets. In both offense and defense, nonpersistent toxic chemical agents are employed to produce rapid casualties among personnel. In the defense, persistent toxic chemicals may also be used in conjunction with minefields and barriers to contaminate and restrict enemy use of important terrain features such as crossroads, bridges, and defiles. Biological agents may be used when delayed casualty effects are desirable and/or acceptable; for example, in advance of amphibious, air-

borne, or airmobile operations, or in retrograde operations if sufficient planning is conducted pertinent to entry or reentry into the contaminated area.

*c.* There are generally no restrictions on the initial employment of nontoxic agents such as flame, smoke, and riot control agents.

*d.* Artillery is capable of firing concentrations of toxic chemical agents. It is also capable of establishing smoke screens, blinding enemy observation posts, and signalling by means of smoke ammunition.

*e.* The division engineers furnish technical advice and assistance to the division in laying and clearing composite minefields which include toxic chemical landmines.

*f.* Maneuver units are capable of delivering toxic chemical agents, flame, smoke, irritant chemical agents, and emplacing chemical landmines.

*g.* Chemical agents may also be delivered by smoke generator units, by naval gunfire, or by aircraft.

## 28. Fire Support Plan

*a.* The brigade fire support plan implements the commander's concept for the employment of supporting fire and contains the necessary details required for the coordination, integration, and delivery of fire. The fire support plan is an annex to the brigade operation order or plan. It may consist of a single document with details of air, artillery, chemical, and naval gunfire included in appropriate paragraphs, or it may have appendices for some or all of the weapons fire plans.

*b.* The fire support plan is prepared by the fire support coordinator (FSCOORD), normally the direct support artillery commander or his representative. The S3 has overall staff responsibility for integrating the fire support plan with the scheme of maneuver or defense plan. The representatives of all fire support means and the S3 work jointly to insure this integration. The basis of the fire suport plan is the commander's guidance and concept of operation. In both, he includes a statement of his desired employment of supporting fires and specifies (in general terms) general target area, scheduling of fires, and priorities of fires. His guidance on nuclear employment specifies the results he expects to achieve with nuclear fires, the results he does not want, troop safety, and the way these fires are to be integrated with his plan of maneuver.

*c.* The exchange of fire support planning data between attached units and the brigade and between brigade and division must be timely and continuous.

## 29. Artillery Fire Planning

*a.* The artillery fire plan for the brigade is prepared by the artillery battalion in direct support of the brigade. It is based on requirements for preplanned fires—

(1) Submitted by the brigade commander and staff.
(2) Submitted by brigade maneuver units.
(3) Imposed by higher headquarters; i.e., to support an attack by an adjacent brigade.

*b.* Requirements for nuclear, chemical and biological fires to be delivered by artillery units are processed through command channels. The commander with approval authority will, if he approves the request, refer it to his fire support element (FSE) in the tactical operations center (TOC) for implementation. If the brigade commander has authority to approve the request, and does so, he passes the fire to request to his FSCOORD.

*c.* The completed brigade artillery fire plan is forwarded to the division artillery FDC where it is integrated into the artillery fire plan for the division. This is essential to permit concurrent and coordinated fire support planning at all levels. Figure 6 illustrates artillery fire planning channels. A copy of the brigade artillery fire plan may be attached as an appendix to the brigade fire support plan.

## 30. Fire Support Requests

*a. Nonnuclear Artillery Fires.* Requests for nonnuclear artillery fires are coordinated by the forward observer with the committed company and then transmitted directly to the fire direction center (FDC) of the supporting artillery battalion. Artillery fire requests originating at battalion and brigade are sent directly to the DS artillery battalion FDC. This FDC will request any additional fires required from a reinforcing artillery unit, if appropriate, or from the FDC of the next higher echelon.

*b. Nuclear, Chemical and Biological Fires.* When their use has been authorized, decisions to employ nuclear weapons and chemical and biological agents rest with the commander to whom the weapons are allocated. Authority to employ fallout-producing bursts normally is delegated to the lowest commander whose area of operations can be expected to encompass the probable area of predicted tactically significant fallout. Authority to employ chemical agents normally is delegated to the lowest commander whose

area of operations can be expected to encompass the probable area of predicted contamination to include the downwind hazard. Requests for fires are processed through command channels to the next higher command. Procedures are designed to insure rapid transmission and delivery of requests to the commander or his representative authorized to act on the request. Notification of the request may also be sent through fire support channels to alert the fire direction center and to insure prompt delivery by using a concurrent transmission through fire support channels.

*c. Air Support.*

(1) Preplanned air requests are processed by battalions and the brigade in the same manner as other fires. The preplanned air requests are transmitted through air requests channels by the brigade S3 Air to the tactical air support element (TASE) in the division TOC.

(2) Immediate air requests originating at company or battalion level are transmitted by the battalion directly to the division G3 Air. Such requests are monitored by the brigade S3 Air who takes no action unless the request is disapproved by the brigade, in which case he enters the air request net to issue the necessary disapproval. Requests for immediate air strikes originating at the brigade are transmitted over the air request net to the division G3 Air.

*d. Naval Gunfire.* Requests from combat units for naval gunfire are submitted through naval gunfire liaison personnel attached to the division. When naval gunfire is employed to attack a target, it is fired by direct or general support ships using naval gunfire procedures.

*e. Armed Helicopters.* Most of the helicopters in the division are armed with varying combinations of aircraft weapons. This aerial fire support means normally is employed in support of assault units in airmobile operations. Requests for this fire support are forwarded to the Army aviation element (AAE) of the TOC. Approved requests are assigned to the aviation battalion for implementation.

*f. Channels of Fire Requests.* Figure 7 illustrates the channels of fire requests.

## Section III. AIR DEFENSE ARTILLERY

### 31. Air Defense Artillery

Air defense of the field army area is provided by the field army air defense commander through the air defense artillery brigade

and by corps air defense units. Air defense units with a surface-to-surface capability may be deployed throughout the division zone. An air defense artillery battalion may be attached to the division. Their missions include defense against airmobile attack. Frequently, this mission permits the air defense unit to take under fire airborne or airlanded troops in or near their landing areas. This part of the air defense mission should be integrated with the brigade plans for countering these enemy forces. When the brigade is operating semi-independently or when the enemy air threat is not a primary consideration, air defense units with a surface-to-surface capability may be attached. In the latter case, air defense units may be employed in a ground support role.

## Section IV. INTELLIGENCE SUPPORT

### 32. General

Intelligence is a basic requirement for the successful planning and conduct of military operations. The intelligence capabilities of the brigade are supplemented by intelligence agencies of higher headquarters. Detailed intelligence procedures are prescribed in FM 30–5 and other appropriate field manuals.

### 33. Flow of Information and Intelligence

*a.* The brigade S2 section must be capable of processing a mass of information quickly. As this information is processed into intelligence, the S2 section insures timely dissemination to all staff sections and to higher, lower, and adjacent units.

*b.* The division operations and intelligence net provides a direct communication means between brigade and division headquarters.

### 34. Reconnaissance and Surveillance

*a. Ground Reconnaissance.*

(1) Each maneuver unit attached to the brigade has an organic ground reconnaissance and surveillance capability. Aggressive ground reconnaissance is a positive means of determining disposition and identification of enemy forces. The greater the dispersion of the battlefield, the greater is the requirement for reconnaissance and the more readily patrols can penetrate and develop enemy positions.

(2) The armored cavalry squadron is the principal division reconnaissance unit. This unit is normally employed under division control, but the squadron (or its elements) may be attached to the brigade.

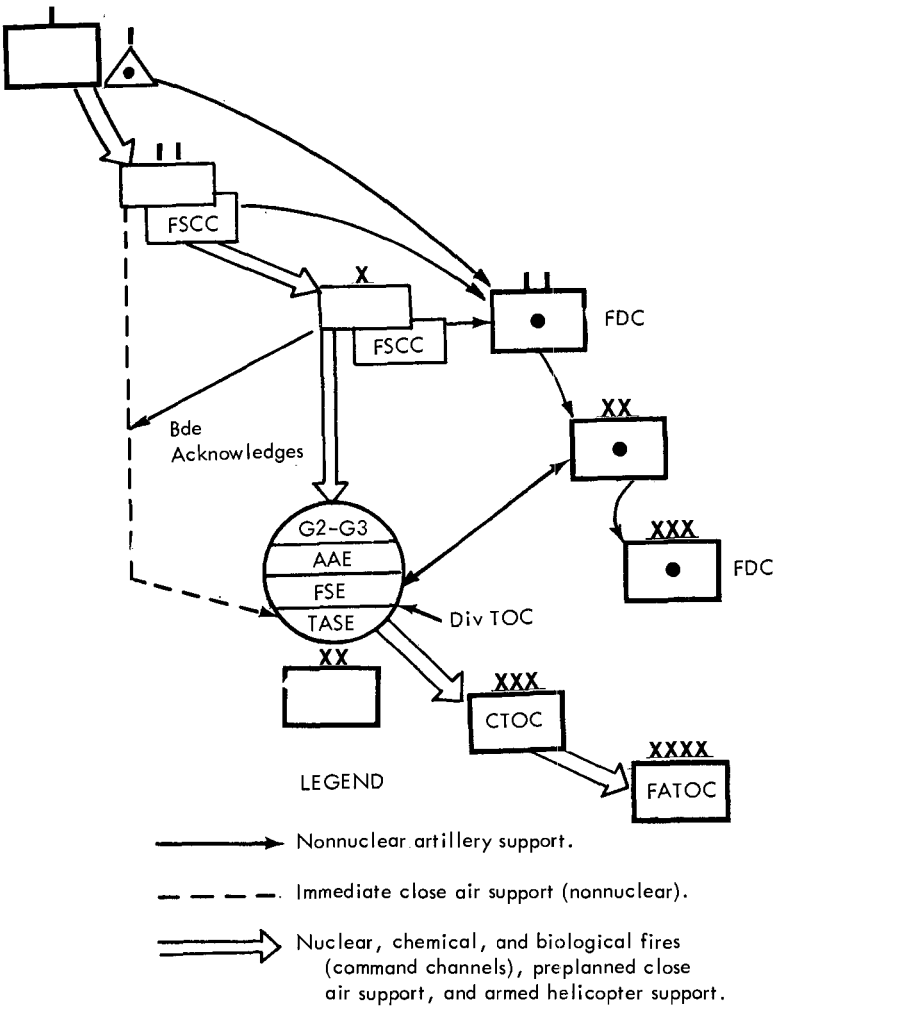



*Figure 7. Fire support requests.*

*b. Air Reconnaissance.* Air reconnaissance should be continuous and coordinated with ground reconnaissance. The brigade commander (through the S2) must exploit the capabilities of Army aviation. Requests for air reconnaissance missions from subordinate units are processed by the brigade S2, then transmitted to the division TOC for approval. The request is passed to the aerial surveillance and target acquisition platoon of the division aviation battalion for implementation. Requests that cannot be accomplished are forwarded to higher headquarters.

(1) *Army aviation.* Army aviation may be used in a primary air reconnaissance role or in support of ground reconnaissance elements. The division aviation battalion aerial surveillance capability employs visual observation and sensory devices to include photography, infrared and radar. It also has the capability for battle area illumination for night reconnaissance. The brigade aviation section has a limited reconnaissance capability. Helicopters extend the range of patrols by moving them to their starting points and picking them up at prearranged locations.

(2) *Tactical Air Force.* The reconnaissance wings of the tactical Air Force include reconnaissance-type aircraft. These aircraft provide photographic, electronic, weather, and limited visual reconnaissance information.

## 35. Counterintelligence

*a.* Effective counterintelligence increases the security of the brigade and aids in the achievement of surprise by denying information to the enemy through active and passive measures. Active counterintelligence measures are designed to block the enemy's attempts to gain information, and they include counterreconnaissance, challenge and password systems, and air and ground reconnaissance to detect and expose the enemy's intelligence effort. Passive measures conceal information from the enemy. They include censorship, secrecy discipline, security of classified documents and materiel, signal communications and security, movement control, use of concealment, camouflage, electronic countermeasures, and control of civil populations.

*b.* The brigade assistant S2 is usually designated as the brigade counterintelligence officer.

## 36. Captured Enemy Materiel

The S2 is responsible for the evacuation of captured enemy materiel in accordance with command policy and FM 30–5 when such materiel has an intelligence value.

## 37. Intelligence Support of Tactical Cover and Deception Operations

Planning of tactical cover and deception operations is primarily an S3 responsibility. The intelligence aspects of these operations, however, must be coordinated with the S2. Although planning and supervision of tactical cover and deception oper-

ations is normally accomplished by division and higher echelons, the brigade plays a major role in executing such plans. Close coordination between the brigade S2 and S3 and the division G2 and G3 is essential to insure successful execution of tactical cover and deception operations (FM 31–40).

### 38. Intelligence Corps Personnel

The brigade may have attached to it an Interrogation of Prisoner of War (IPW) team and a counterintelligence (CI) team for normal operations. When the brigade is operating as a separate brigade, it may receive an Imagery Interpretation (I.I.) team in addition to the IPW and CI teams.

## Section V. CIVIL AFFAIRS

### 39. General

*a.* The brigade conducts civil affairs activities as directed by division or higher headquarters, normally only to the extent required to prevent interference with combat operations by the civilian population. This may include control over civilian populations to clear combat areas, prevent congestion of roads, and maintain security.

*b.* A civil affairs section (G5) normally augments the division staff, and a CA command support platoon (consisting of a platoon headquarters and a language team) is usually attached to the division. Additional civil affairs functional specialists teams will be attached temporarily to the division as required.

## Section VI. SUPPORT FROM DIVISIONAL UNITS

### 40. Aviation

The aviation battalion provides general aviation support to the division. Of primary concern to the brigade are the airmobile company and the aerial surveillance and target acquisition platoon.

*a.* The airmobile company has a tactical lift capability of one rifle company. The airmobile company is employed from dispersed locations where it can respond rapidly to airlift requirements of the division.

*b.* The aerial surveillance and target acquisition platoon is equipped with manned aircraft and drone systems. The drone systems operate from forward locations while manned aircraft operate from the division airstrip. The platoon has the mission

of extending and supplementing the division's ground observation by use of aerial infrared, radar and photographic sensors. Requests for aerial surveillance missions are processed by the brigade S2 to the division TOC (para 34).

## 41. Chemical

Chemical corps units are provided by field army and may operate under division control. These units may be further attached or placed in support of the brigade.

*a.* These units have the capability of providing the following types of support.

(1) Smoke operations.
(2) CBR survey and reconnaissance to include radiological surveys.
(3) Servicing of flame weapons.
(4) Decontamination.
(5) Chemical technical intelligence.

*b.* The initial source of chemical supply, maintenance and service is provided by elements of the division support command. This includes personnel and equipment to service mechanized flamethrowers organic to the mechanized infantry battalion. This support may be supplemented by units of the field army.

## 42. Communication

*a.* The forward communication company of the division signal battalion establishes signal centers in the forward area of the division. These signal centers provide message center, motor messenger, cryptographic, teletype, telephone, and radio (excluding internal radio nets) service for all units in the vicinity supplemental to organic facilities. A signal center is located normally in the area of the brigade trains.

*b.* Multichannel communication links (radio relay and/or cable) interconnect the signal center with brigade headquarters. In addition, radio/wire integration facilities are provided in each forward signal center to interconnect mobile FM radio stations with the signal center. This provides a means of communicating between an FM radio station and other elements of the division connected to the signal center by telephone.

## 43. Engineer

*a.* One engineer company from the division engineer battalion is normally placed in support of the brigade, but may be attached when distances or the tactical situation preclude centralized engi-

neer control. This unit may be reinforced by additional division engineer units or equipment. Special engineer units and equipment support the brigade when it is employed in river-crossing operations and amphibious operations.

*b.* The commander of the engineer unit attached to or in support of the brigade functions as the brigade engineer.

## 44. Military Police

The military police company under the operational control of the division provost marshal provides military police support to the division. A military police platoon is normally employed in support of each committed brigade to provide support on an area basis. The brigade S1 coordinates military police support in the brigade.

## 45. Logistic Support Elements

*a.* Division support command units operating from the brigade trains area provide logistic support to the brigade and other divisional units in the area. Support command elements normally consist of the following:

(1) A forward support company of the maintenance battalion with teams from the aircraft maintenance company. This company has the capability of providing one-stop field maintenance, repair parts, and mobile maintenance work parties for the maintenance of all equipment of the brigade except medical, electrical accounting machines, and cryptographic. The headquarters and main support company provides backup support to this unit and provides salvage and evacuation service for the brigade for those items not evacuated directly to the supply and transport battalion of the division support command.

(2) A medical company from the division medical battalion. This company has the capability of establishing and operating a clearing station. It evacuates casualties from battalion aid stations, using the ambulance platoon, and operates a medical supply point for brigade elements.

(3) Division distributing points for class I, III, and fast moving class II and IV supplies. A class V distributing point may be established for the airborne brigade.

(4) A graves registration team, a salvage collecting point, and a bath facility.

(5) Water supply point (provided by engineer battalion).

*b.* The support command units employed with a brigade operate under the control of the support command commander. However, when the brigade is organized for independent or semi-independent operations, these support elements are normally attached to the brigade.

*c.* The brigade S4 coordinates security, specifies the location of installations in the trains areas, and controls displacement of division support command elements when they march with the brigade.

*d.* For additional information on the organization and operations of the division support command elements, see FM 54–2.

## 46. Aerial Resupply

*a.* Requests for aerial resupply from brigade units are submitted to the brigade S4. The S4 then takes the necessary action to obtain the supplies and the aerial delivery means. This action may include—

(1) Obtaining the supplies from the unit's field trains if available there.
(2) Submitting the request to the supply and transport battalion for procurement and aerial delivery.
(3) Using light observation helicopters organic to the brigade for delivery in emergencies, if feasible.
(4) Requesting G4 to provide necessary aircraft and coordinating pickup and delivery of the supplies.

*b.* Delivery may be made by the USAF using parachute delivery or (in certain situations) airlanded means, and by Army aircraft using both methods.

*c.* For details of aerial delivery for airborne operations, see FM 57–10.

# CHAPTER 4

# OFFENSE

## Section I. GENERAL

### 47. Purpose

*a.* The purpose of offensive operations is to accomplish one or more of the following:

(1) Destroy enemy forces.
(2) Deprive the enemy of required resources.
(3) Seize terrain.
(4) Develop enemy dispositions.
(5) Divert the enemy's attention from other areas.

*b.* Offensive action is necessary to achieve decisive results and to maintain freedom of action (FM 61–100 and FM 100–5).

*c.* The brigade conducts offensive operations as part of the division or, when suitably reinforced, in an independent or semi-independent role.

### 48. Concept

*a.* In nuclear war, no clear-cut distinction between the offense and the defense for the force (as a whole) may exist. When nuclear weapons are employed on any scale, shifts in balance of power between opposing combat forces at brigade level may occur rapidly, with corresponding shifts from offense to defense and defense to offense being mandatory. As the scale of nuclear usage increases, the brigade's maneuver capability may at times be curtailed. On the other hand, large-scale nuclear attacks can create opportunities for bold and decisive offensive action. Under such circumstances, the force which can exploit its maneuver capability first will have a decided advantage. The brigade commander must continuously plan toward this end and maintain sufficient flexibility to exploit any advantage that may occur.

*b.* In nonnuclear war with present weapons, transport, and communications, offensive operations should be centrally planned but decentrally executed. Nonnuclear fires are used to support maneuver and to fix, interdict or destroy enemy forces. Chemical fires may be used to increase combat power. Against an enemy

possessing an air arm capable of controlling the airspace for appreciable periods, the brigade avoids concentration that will invite airstrike.

### 49. Forms of Maneuver

*a.* The basic forms of offensive maneuver are the penetration and the envelopment. The frontal attack is a variation of the penetration; a double envelopment and a turning movement are variations of the envelopment. The distinction in the brigade form of maneuver exists primarily in the intent of the brigade commander since the maneuver elements of the brigade may use all the forms of maneuver in the attack. Infiltration is a technique of movement used in conjunction with the several forms of maneuver. The exploitation is an offensive operation which may follow a successful penetration or envelopment. The pursuit is an extension of a successful exploitation.

*b.* The brigade, appropriately organized for combat, has the capability of participating as part of the division in the execution of the forms of offensive maneuver. It may conduct the penetration, the envelopment, or frontal attack. The brigade normally does not conduct the turning movement, although it may participate in such a maneuver.

*c.* A higher commander seldom dictates the form of maneuver to be adopted by the brigade. However, the mission assigned, including the task derived from it, and the requirement for secrecy may impose limitations in time and direction of attack. The mission of the brigade, characteristics of the area of operations, disposition of opposing forces, and the relative combat power of the opposing forces are analyzed to determine the best form of maneuver to be adopted. Normally, terrain, the available time, own dispositions, ability to support the attack, and the enemy situation are the principal factors in choosing the form of maneuver to accomplish the mission.

*d.* All forms of maneuver can be assisted by airborne operations which place forces on the enemy's flanks or in his rear. The airborne brigade, appropriately organized for combat, is well suited for this type operation.

## Section II. PLANNING THE ATTACK

### 50. General

The mission for the brigade is normally assigned by the division and defines the goal toward which the effort of the command is directed. The mission assigned a brigade is usually brief and

general in nature. The brigade commander and his staff carefully study and analyze the mission to determine tasks specifically included in the mission and other tasks not specifically directed but which are implied.

*a.* Successful offensive action requires the massing of superior combat forces at the decisive place and time, the rapid application of this power to destroy the enemy, followed by planned and orderly exploitation and/or dispersal. Speed is essential to success, since the necessary concentration of forces for the attack tends to present a lucrative nuclear target.

*b.* Once an attack is launched, every effort must be made to gain and maintain momentum until the objective is secured. Commanders at all echelons should have destruction of the enemy as their goal, and failing this, the creation (through offensive action) of opportunities for exploitation and pursuit.

*c.* At brigade, one of the major responsibilities of the commander is to plan and conduct his attack so he will have resources immediately available to exploit success and capitalize on the advantages created by the enemy's tactical errors. When the opportunity for decisive action occurs, the commander must unhesitatingly commit the necessary resources.

*d.* The brigade commander and his staff follow a logical sequence of action in planning the attack.

(1) First, the brigade mission is studied and analyzed to insure complete understanding of all tasks (both specific and implied) required to accomplish it.

(2) Next, the brigade commander restates the mission and provides planning guidance to his staff. This guidance is based upon his study of the mission, his knowledge of both the friendly and enemy situation, guidance he has received from higher commanders, and his own professional knowledge and skill. His guidance is usually general in nature, but should indicate courses of action which he feels merit detailed consideration by his staff. He refrains from favoring a specific course of action at this time in order to permit the staff to make unbiased estimates and explore all courses of action which promise likelihood of success.

(3) After receiving the commander's guidance, the staff officers prepare their separate estimates (FM 101–5).

(4) Upon receiving the staff recommendations, the commander completes his own estimate and arrives at his decision. Frequently this will be a rapid process, per-

formed in a few minutes. Prior to announcing his decision, he may consult with commanders of subordinate maneuver battalions. His decision is a statement of the general scheme of maneuver to be adopted and any nuclear fires to be employed to complement it, and is based on the best course of action selected as a result of his estimate. This expression of the scheme of maneuver (the placement and movement of major maneuver elements to accomplish the mission) usually includes the designation and direction of attack of, and terrain to be seized by, the main attack and each supporting attack. It may include the employment of reserves. If applicable, the decision describes the nuclear rounds to be fired and their targets. A decision should be reached and announced to the staff as early as possible in the planning process. Subordinate commanders may be informed so concurrent planning at all levels can take place.

(5) After stating his decision, the commander may provide the staff with his concept of how the operation will be conducted (commander's concept). In doing so, he may elaborate on his decision (explaining any aspects deemed necessary) and, in addition, may provide staff guidance and instructions that will facilitate task planning and preparation of orders. He may include, for example, explanation or clarification of—

(*a*) Purpose of the operation.
(*b*) Scheme of maneuver including any development or phasing.
(*c*) Use of nuclear and other fire support including allocation of nuclear weapons/rounds and duration of firing a preparation.
(*d*) Organization for combat.
(*e*) Requirements for security.
(*f*) General control measures.
(*g*) Any other measures he may consider of broad significance to the command.

(6) The commander's decision and concept of operation are then translated into the operation order which is disseminated to subordinate, adjacent, and higher headquarters.

(7) Following the issuance of the attack order, the commander and his staff supervise and assist in its execution, modifying it as required to meet unexpected changes in the situation. Control measures such as

check points and phase lines are used to enable the brigade to issue fragmentary orders to react to changing situations.

## 51. Objectives

*a.* The brigade objective is usually a key terrain feature, a geographical area, or an enemy force, and it is normally assigned by higher headquarters. However, when not specifically delineated, the brigade commander determines the objective by analysis of his assigned mission. When seizure or destruction of the brigade objective requires the employment of more than one subordinate unit, the objective is clearly subdivided to delineate responsibility. The main attack (when designated) is directed at that portion of the brigade objective, the seizure of which will provide decisive results.

*b.* The assignment of intermediate objectives is kept to the minimum required to insure that the operation is conducted according to the brigade commander's scheme of maneuver. The mobility of the brigade maneuver units may influence selection of objectives. Relatively close-in objectives are assigned in dismounted operations, while deeper objectives may be assigned in situations permitting mounted operations.

*c.* Discretion as to number and location is used in assigning objectives to subordinate units. Subordinate commanders must be fully informed as to the purpose of their attacks and objectives. Commanders must kindle aggressiveness in subordinates and accord them full use of their initiative. Opportunities to destroy the enemy may be presented to the subordinate that could not possibly be foreseen by the higher commander. Procedures must allow such opportunities to be exploited without undue delay.

## 52. Available Forces

*a.* Maneuver and combat support units are attached to, or placed in support of, the brigade by division and are organized for combat by the brigade. When the brigade is given an offensive mission, the commander analyzes the forces allocated (including fire support) from the viewpoint of the total resources available for the assigned mission as compared to his estimated requirements for the course of action he has selected. If, however, the brigade commander determines that additional forces and support are desired, he immediately requests higher headquarters to make them available.

*b.* When nuclear weapons have been allocated for an attack, the brigade commander attempts to use them on remunerative tar-

gets in such a way as to reduce the requirements for maneuver forces to close with and destroy the enemy in the target area. This does not preclude the requirement for lesser forces to exploit the effects of weapons so employed. Use of nuclear fires may permit adoption of a course of action which may otherwise be infeasible.

*c.* A toxic chemical attack produces casualties without the destructive effect of nuclear fires. Toxic chemical in conjunction with nuclear fires increases the casualties inflicted upon the enemy and retards his efforts to organize his defense.

## 53. Scheme of Maneuver

*a. General.* The scheme of maneuver is the commander's placement and movement of his maneuver units to accomplish the mission. At brigade level, the scheme of maneuver is based upon forces attached by division. In the attack, maneuver units normally are employed in the main attack, supporting attack(s), and the reserve. When the brigade attacks in a single column, however, only a main attack (lead battalion) and reserves (balance of the battalions) will be involved. Also, when attacking battalions are assigned objectives whose seizure offers equal opportunity for success or when the brigade attacks in multiple columns to develop a vague situation, to conduct a reconnaissance in force, or in a movement to contact, main and supporting attacks may not be designated initially. As the situation develops, one of the battalions may be designated as the main attack. When appropriately reinforced with Army aircraft the brigade may integrate airmobile operation into most all schemes of maneuver.

*b. Main Attack.*

(1) The main attack is directed against the objective that best facilitates the accomplishment of the brigade mission and is accorded first priority in the allocation of combat power. It is provided the means to obtain decisive results.

(2) The main attack is weighted by the allocation of maneuver units and by fire and other combat support. It may be weighted by giving it advantages such as the best avenue of approach and by directing it against enemy weakness.

(3) The main attack may be changed from one unit to another during the conduct of the attack to exploit a successful advance or to take advantage of weakness detected in the enemy's defenses.

*c. Supporting Attack(s).*

(1) A supporting attack should contribute to the success of the main attack by accomplishing one or more of the following:

(*a*) Seizing terrain which facilitates the maneuver of the main attack.

(*b*) Fixing the enemy in position.

(*c*) Deceiving the enemy as to location of the main attack.

(*d*) Forcing the enemy to commit reserves prematurely, piecemeal, or in an indecisive area.

(*e*) Preventing reinforcement in the area of the main attack.

(2) Adequate means are provided for the accomplishment of these tasks. Nuclear and chemical weapons may be used to accomplish tasks which might otherwise require the commitment of large bodies of troops. If there is an abundance of means (especially nuclear weapons), the maneuver elements of the supporting attack forces may approximate those of the main attack.

*d. Reserves.*

(1) *General.* In the attack, the brigade retains a reserve to enter combat offensively at a decisive time and place to exploit success and complete the accomplishment of the mission. Mobility (particularly aircraft) vastly enhances the potential of a reserve. A reserve also provides the commander a means of dealing with unforeseen contingencies. The reserve should not be used to redeem failure but to:

(*a*) Exploit success.

(*b*) Reinforce the attack.

(*c*) Maintain or increase the momentum of the attack.

(*d*) Hold ground seized by the attacking force.

(*e*) Defeat or block enemy counterattacks.

(*f*) Provide security.

(2) *Size of reserve.* A deep objective, limited knowledge of the enemy situation, or inability to visualize the attack to its final objective requires the retention of a stronger reserve than in situations where these conditions are known. When attacking an enemy known to have inferior mobility, the reserve may be smaller than when attacking one of equal or superior mobility.

(3) *Location of the reserve.* Dispersal of reserve elements into multiple assembly areas or march columns provides

some protection from nuclear attack. Consideration is given to locations that facilitate rapid movement to points of probable employment.

(4) *Movement of the reserve.* In fast-moving operations, the reserve moves at a prescribed distance behind the attacking echelons. In slow-moving operations, the reserve moves by bounds. In certain operations, the reserve may be transported by Army aviation. Regardless of how it moves, the reserve must always be positioned for rapid employment and must remain within supporting distance of the committed forces where it may be prepared to weight the main attack or to be committed should the attack lose its momentum.

(5) *Nuclear weapons.* Nuclear weapons are allocated by division. The brigade normally holds a portion of its nuclear weapons in reserve.

(6) *Reconstitution of reserve.* Plans should be made prior to the attack to reconstitute a reserve at the earliest opportunity after the reserve is committed.

*e. Formations.* The scheme of maneuver specified in the commander's decision establishes the brigade formation for the attack. The formation will be a column, or a line, or variations of these. Within a brigade formation, the battalions may be in formations appropriate to the accomplishment of their missions.

(1) *Column formation.* In the column formation, the brigade attacks in a column of battalions along a single axis. A variation of the column is the echelon formation in which the battalions move at staggered intervals on different routes along a single brigade axis (fig. 8). The column formation is suitable when the brigade attacks along a narrow front, when the enemy situation is vague, or when the initial enemy resistance is expected to be light. It may also be appropriate when nuclear weapons are employed to destroy the enemy in a portion of a zone. The column formation provides the brigade commander with the maximum flexibility in employment of his forces, leaving the bulk of the maneuver units available for commitment as the situation develops. The disadvantages of the formation are that it lacks firepower to the front and more time to move reserve elements forward for commitment: for these reasons mounted forces are better suited for this formation.

(2) *Linear formation.* The linear formation employs two or more battalions in the attacking echelon. It is appropriate

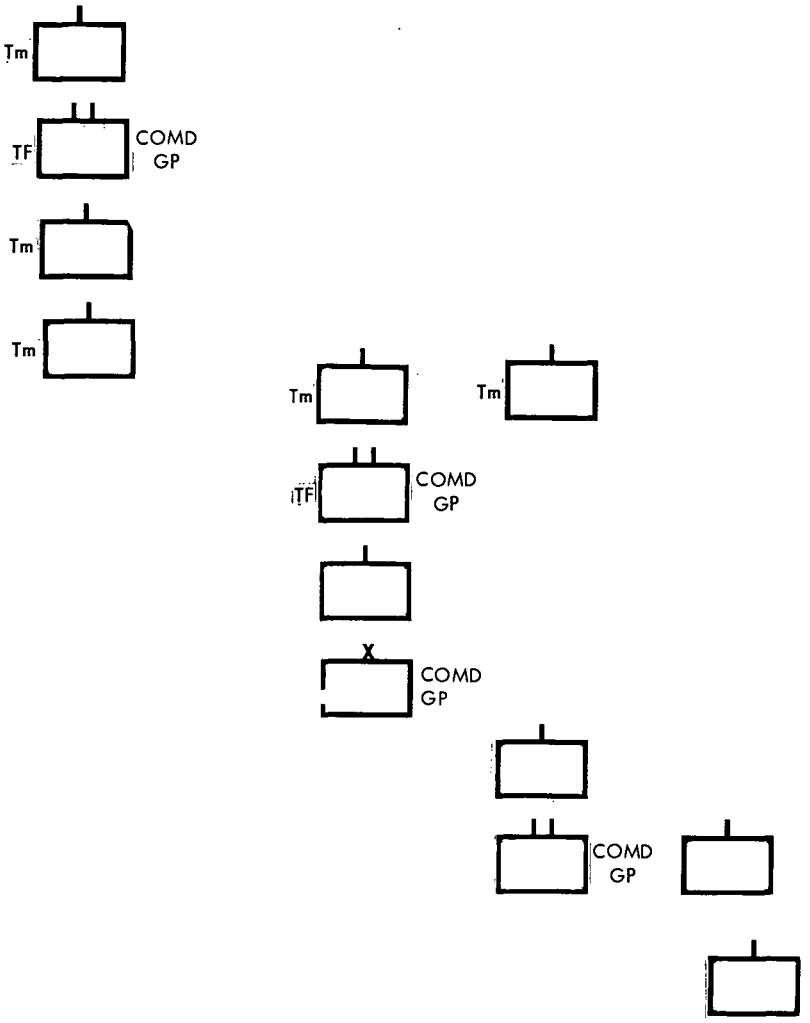
when maximum combat power forward is desired. Such may be the case in an attack against strongly defended positions or during an exploitation phase when available intelligence provides information of the enemy dispositions and capabilities in sufficient detail to warrant deployment of the brigade prior to closing with the main enemy forces. However, with dismounted forces, when conditions otherwise favor a column formation, the linear formation may be used in consideration of the time required to deploy reserve battalions from the rear of a column formation. Similar considerations are involved with respect to the interval between attacking battalions. Although it will vary with the mission, terrain, and enemy situation, the interval normally is not so great as to preclude mutual support (movement of one battalion, if necessary, to the aid of another to prevent defeat in detail). In mounted operations, mobility permits the interval to be greater than in dismounted operations. In employing the linear formation, an avenue of approach for each attacking battalion must be available.

## 54. Organization for Combat

*a. General.* The mission, enemy situation, terrain, and troops available are considered in determining the brigade organization for combat. Generally, infantry and tanks are organized into combined-arms teams. The task organization is adjusted as required in the course of an operation to meet the requirements of changing conditions. The availability of Army aviation to support an operation, particularly of battalion size, enhances the brigades combat effectiveness.

*b. Infantry-Heavy.* An infantry-heavy battalion task force is best suited for operations where an obstacle must be breeched, where antitank defenses are strong, when a built-up area must be seized, or where terrain is unfavorable for employment of a large number of armored vehicles. In such operations, tanks support the advance of the infantry. For employment in mounted operations, mechanized or motorized infantry battalion task forces may be organized as infantry-heavy. The tanks in this case, however, are employed primarily to lead the attack and are supported by infantry.

*c. Tank-Heavy.* Tank-heavy battalion task forces are organized primarily for operations that permit mounted attacks, tanks leading and supported by infantry. Such task forces are normally employed if the enemy is strong in armor, if there is favorable tank




NOTE: THE BRIGADE IS ADVANCING ECHELONED TO THE RIGHT WITH THE LEAD BATTALION IN COLUMN FORMATION, THE SECOND BATTALION IN A LINEAR FORMATION, WHILE THE REAR BATTALION IS ECHELONED TO THE RIGHT. THE BRIGADE ECHELON COULD ALSO BE TO THE LEFT.

*Figure 8. Brigade in echelon formation.*

terrain, or if there is a possibility of rapid exploitation. Tank-heavy forces are appropriate for the enveloping force in a brigade envelopment or for the brigade reserve organized to permit rapid movement through a gap (created by forward battalions) to seize the brigade penetration objective.

*d. Balanced.* Task forces consisting of equal numbers of tank and infantry elements may be organized when the enemy situation is too vague to determine the need for tank or infantry heavy forces. This organization permits commitment of forces capable of performing either tank or infantry missions.

*e. Airmobile.* When suitably reinforced with Army aircraft, the brigade may conduct a brigade airmobile operation. Airmobile forces operate relatively independent of the terrain influences that restrict ground operations. Offensive operations are usually oriented on the location and destruction of enemy forces rather than on the seizure or retention of terrain features. Airmobile operations are characterized by rapid execution and timely withdrawal. A rapid tempo of successive operations is maintained to seize the initiative, to keep the enemy off balance, and to avoid being located or defeated in detail.

*f. Support.*

(1) The supporting artillery for the brigade is placed in direct support of, or attached to, the brigade by division headquarters. In either role, its method of employment, its integration in the brigade formation for the attack, and the priority of its fires are controlled by the brigade commander. In the movement to contact, in the exploitation, or when deep objectives are to be seized, direct support artillery must move with the maneuver elements in order to keep within supporting distance. If the artillery battalion is attached to brigade, an artillery battery may be further attached to an infantry or tank battalion when the battalion is operating at such distances from the bulk of the brigade as to preclude effective centralized artillery control.

(2) Forward area weapon battalions when attached or in support of the brigade provide a dual capability. Primarily, they are used for mobile air defense against attack by low-flying aircraft. Air defense units are deployed throughout the brigade to provide protection to nuclear delivery means, march columns, assembly areas, and other critical areas and installations. When the air threat is minimal these units may also be integrated into the ground fire support plan.

(3) Attached or supporting engineers are made available to the brigade in offensive operations. Engineer units should be retained under centralized control (whenever possible) to provide for unity of engineer effort and maximum use

of resources. Normally, an engineer company is attached to the brigade, its platoons may be further attached to maneuver battalions when centralized engineer control would be difficult or impractical.

(4) Trucks or Army aircraft supporting the brigade may be further allocated to the control of the using maneuver units. Whenever possible, such attachment should preserve unit integrity of the transportation unit.

*g. Brigade Command Installations.* In the attack, the brigade commander operates from a command group located in the area of the brigade unit making the main effort where he can best influence the action. The brigade executive officer normally remains with the command post. Radio is the primary means of control.

*h. Brigade Trains.* In most situations, the brigade trains operate from a position well forward in the brigade area. They displace as required. In exceptional cases where a brigade element, e.g., battalion task force, is employed in a semi-independent role away from the main body of the brigade, essential medical, supply, and maintenance elements from the brigade trains may be attached to it.

## 55. Fire Planning

*a. Integration.* The plan of fire support and the scheme of maneuver for the attack must be closely coordinated and integrated to provide maximum effectiveness. They are developed concurrently and are revised as the operation progresses. Planning should include the use of all available fire support means to include air defense artillery, and close air support. Whenever possible, weapons of maneuver battalions in brigade reserve are employed to reinforce the fires of battalions making the attack.

(1) *Determination to fire.* The commander ordering the attack determines whether an artillery preparation will be fired. Factors to be considered are:

(*a*) Whether the probable effect of the preparation will justify the attendant loss of tactical surprise.

(*b*) Availability of fire support means, to include supply of ammunition.

(*c*) The number of remunerative targets which can be located in time to prepare and assign fires.

(*d*) Whether the effect sought can be accomplished before the enemy can change his tactical dispositions.

(*e*) The effects of fires in creating obstacles to planned maneuver.

(*f*) Troop-safety requirements in relation to targets.

(2) *Fires during the conduct of the attack.* The brigade fire support plan should include on-call fires which can be quickly placed in all areas and on targets when need for such fires can be envisioned. On-call fires include nuclear, chemical, and nonnuclear. These fires are used to assist the attacking force and consolidation on the objective. Fire support agencies also control ammunition resupply and expenditure to insure adequate fire support for targets of opportunity which may develop during the attack.

(3) *Fires during reorganization and consolidation.* Fire support to cover reorganization and consolidation after objectives have been seized is included in the fire support plan. Fire data for such fires are as complete as possible to permit rapid and effective fire support for repelling enemy counterattacks.

*b. Alternate Plans.* The availability of nuclear fires may often be the decisive influence on the scheme of maneuver. For example, in a penetration, nuclear fires may be programmed to accomplish the rupture in the enemy's position or to widen the gap, or both. If the plan of maneuver has been determined by the planned employment of nuclear weapons, alternate plans for the attack (based on the assumption that planned nuclear weapons may not produce the predicted effects or cannot be delivered) must be prepared.

## 56. Control Measures for the Attack

The brigade commander prescribes only those control measures required to adequately control the operation of the brigade, as well as those controls specified by division or higher command. The latter are limited in a mission-type order when the brigade is assigned independent or semi-independent roles or may be in considerable detail when the brigade is part of a coordinated division attack. Additional control measures may be imposed to meet unforeseen changes in the plan after the attack develops. They include:

*a. Objectives.* See paragraphs 69 and 73.

*b. Line of Departure.*

(1) A line of departure (LD) should be generally perpendicular to the direction of advance, easily recognizable on the ground, and as near the enemy as possible. It should be protected from small-arms and other flat-trajectory fire and be under control of friendly forces. If nuclear weapons are to be employed, the time and location of the detonation should be considered in location of the LD to insure conformance with guidance on troop safety.

(2) When units are in contact, their positions may be designated as the line of departure. For units not in contact, a line of departure based upon terrain is prescribed for their employment; or, as in a passage of lines, the line of contact of the unit through which the passage is to be made.

(3) Occasionally, the dispersion of the brigade laterally and in depth may make it desirable to assign separate lines of departure and times of attack to the various attacking battalions.

*c. Time of Attack.*

(1) In selecting the time of attack, consideration is given to requirements imposed by higher headquarters; the time required for subordinate units to reconnoiter, prepare and coordinate plans, issue orders, organize the attacking units, and move to the line of departure; and the possibility of taking advantage of an enemy weakness before he can rectify it.

(2) Stereotyped times of attack are avoided to enhance surprise and to prevent prior preparation by the enemy.

(3) When nuclear weapons are employed prior to an attack, their delivery is closely coordinated with the time of attack. Time may be required for damage assessment and the issuance, if necessary, of modifying orders. It is desirable that the attack follow immediately after the nuclear preparation. Under some conditions, however, dust and smoke may delay the attack until adequate visibility exists. A habitual relationship of time of attack to the time of nuclear preparation must be avoided.

(4) Units, particularly those with mission type orders, continuing the attack or entering the exploitation phase, may be assigned a general rather than an exact time of attack, e.g., "at once," "without delay," "continue," or "on order."

*d. Boundaries.*

(1) Boundaries are used to guide the forward advance of units in the attack and to control the fires and maneuver of two adjacent units. Boundaries are normally assigned along terrain features easily recognizable on the ground and are situated so key terrain features and avenues of approach are wholly inclusive to one unit. A boundary should extend forward beyond the objective at least to the depth necessary for coordination fires in the seizure

and consolidation of the objective. At the line of contact, boundaries are normally extended rearward to the extent necessary to insure that sufficient space is provided for the force concerned, including its command and administrative installations. The rearward projection of the boundaries defines the rear limit of the unit's area of responsibility.

(2) Units may move and fire temporarily across boundaries only after coordination with the adjacent commander and after notification of the next higher commander.

(3) Boundaries are used when assignment of zones of action is required to facilitate coordination of fires of two adjacent units or to control converging forces. In certain operations, boundaries may be used only at the line of departure and in the objective area.

*e. Axis of Advance.*

(1) An axis of advance indicates the general direction of movement of a unit. It normally follows the well-defined terrain features of an avenue of approach such as a series of ridgelines, hilltops, or roads extending to the objective area. The commander attacks along his assigned axis as rapidly as conditions permit and does not allow small enemy forces to delay the advance to and seizure of the objective. The commander may maneuver his troops and place his fires freely to either side of the axis (as necessary) to avoid obstacles, to engage the enemy, or to bypass enemy forces which do not threaten his security or jeopardize the accomplishment of his mission.

(2) This control measure is most frequently used when the use of a certain approach facilitates seizure of a deep objective in operations against light, disorganized or discontinuous enemy resistance, and when the need for a closely coordinated attack does not exist.

(3) An axis of advance may be used within a zone of action to more closely control the general location of a subordinate unit within the assigned zone of action such as in nuclear-supported attack when the brigade commander desires dispersion between the main attacks of battalions in adjacent zones of action.

*f. Direction of Attack.* When given a direction of attack, the unit must attack with the mass of its force along a definitely prescribed route. Because of its restrictive nature, the direction of attack is seldom used in the offense except in counterattacks and night attacks. It may be used to insure that a supporting attack makes maximum contribution to the main attack.

*g. Assembly Area.*

(1) An assembly area is an area in which a command assembles preparatory to further action. Division normally indicates the general location of brigade assembly areas. Within these areas the brigade indicates specific locations for its subordinate units. In the assembly area, orders are issued, maintenance and supply accomplished, and the organization for combat completed.

(2) The location of the assembly area is relative to the mobility of the force. A motorized infantry, mechanized, or airborne brigade can attack from an assembly area farther rearward than a dismounted unit. To reduce nuclear vulnerability, multiple dispersed assembly areas are used. Assembly areas near units in contact or large concentrations of troops are avoided.

(3) Assembly areas may be so far rearward as to require refueling of motorized or mechanized forces prior to crossing the line of departure. Refueling areas are designated along the routes forward, and are located (if the situation permits) beyond the range of enemy light artillery. Final coordination for the attack may be conducted concurrently with the refueling operation. Units then proceed directly to the line of departure or attack positions.

(4) Assembly areas should be concealed from air and ground observation and be of such size as to avoid presentation of lucrative targets to artillery, air, or nuclear attack. Suitable routes forward should be available. Ground observation and natural protection from tank attack are desirable. When the mobility of the force permits, assembly areas should be beyond the effective range of the bulk of enemy artillery.

(5) Assembly areas may be designated for dispersal of units following the attack.

*h. Attack Position.* The brigade does not normally use an attack position.

*i. Phase Lines.* A phase line is used to coordinate forward movements of brigade units and may be used to limit the rate of advance of attacking forces. A phase line extends completely across the brigade zone and should be located on a well defined terrain feature. Units report the time of their arrival at designated phase lines, but do not halt their attack unless directed to do so prior to or upon reaching the line.

*j. Checkpoints.* Checkpoints are reference points oriented on specific geographical locations. They are used in reporting a unit's location and progress, in reporting information of enemy, and in requesting fires.

*k. Infiltration Lanes.* Within the area of an attack by infiltration, lanes are designated to provide sufficient space for movement of infiltrating groups to move and to aid in directional control and fire support. Such lanes are not normally designated by the brigade order.

*l. Other Control Measures.* For control measures used in airborne operations, see FM 57–10 and FM 57–35.

## 57. Security

*a. General.*

(1) The brigade commander is responsible for the security of the brigade as a whole. In turn, commanders of each subordinate element of the brigade are responsible for security of their units. The brigade takes active and passive measures prior to the attack to prevent the enemy from determining the time and place of the attack and to cover the brigade's preparation for it. Tactical cover and deception plans are not normally included as part of the brigade's operation order or plan, but the brigade assists in the implementation of tactical cover and deception plans made by division or higher headquarters.

(2) The brigade commander employs attached units (or elements of them) and supporting forces to obtain the desired security. Elements of the division cavalry squadron may be attached to the brigade and are ideal for security roles. During the attack, security may be obtained by employment of security forces under brigade control and surveillance means or by the disposition of brigade forces, location of friendly units, the speed with which the attack is executed, the control of key terrain, and the use of fires.

(3) Employment of forces specifically to provide security to the brigade as a whole is kept to the minimum consistent with the requirement. When brigade security forces are employed, they operate directly under brigade control and are given specific guidance as necessary. In determining the requirement for brigade security, the brigade commander considers the security afforded by other sources. Exceptionally, a subordinate battalion may be directed to provide under its control a force for the security of the brigade.

*b. Coverage of Gaps.* When the brigade attacks on a broad front, gaps of considerable distance can be expected to occur between battalions within the brigade and between the brigade and adjacent units. Responsibility for control of such gaps must be clearly specified by brigade for subordinate elements or by higher headquarters when gaps occur between brigades or in relation to adjacent units.

(1) Such gaps are controlled primarily by security forces, patrols, continuous ground and aerial surveillance, and by fire, using resources immediately available to the brigade and other resources such as tactical air.

(2) Enemy forces discovered in gaps which are capable of seriously interfering with the accomplishment of the mission are destroyed by fire or by fire and maneuver. Preferably, they are destroyed by fires to avoid commitment of maneuver forces. Those enemy forces not posing a serious threat may be contained by minimum force until they can be eliminated by brigade reserve units or by other forces following the brigade.

### 58. Combat Service Support

The plan of attack must be capable of being supported logistically. The brigade commander is primarily concerned with critical shortages of equipment and supplies that may adversely affect the brigade's combat operation. If a projected operation cannot be supported with resources available to the brigade, assistance is requested from higher headquarters (FM 54–2).

## Section III. MOVEMENT TO CONTACT

### 59. General

*a.* A movement to contact is a tactical operation to gain initial contact with the enemy or to regain lost contact. Its purpose is the early development of the situation to provide an advantage prior to decisive engagement. The advance is conducted on a broad front. It may take the form of an administrative march when contact with the enemy is remote, a tactical column when contact is improbable, or an approach march when contact is imminent.

*b.* Security is a critical consideration in the movement to contact. It is enhanced by the formation adopted by the brigade, by early development of the situation, and by retaining the bulk of the brigade's combat power uncommitted and readily available for rapid employment against the enemy. When available, tactical air is used to provide column cover.

*c.* The commander exploits every collection means and agency at his disposal to secure information about the enemy, to prevent surprise, to acquire target information, and to gain a maneuver advantage.

*d.* The brigade may conduct a movement to contact as part of the division or, when suitably reinforced, in an independent operation.

*e.* The movement to contact must be carefully planned, but commanders of attached maneuver battalions should be given maximum authority and freedom of action to execute the advance rapidly and aggressively. March objectives, phase lines, checkpoints, and axes of advance are employed. The brigade must be able to plan and disseminate mission-type orders to effectively commit itself in a coordinated attack when the situation calls for it.

*f.* Maximum use is made of forward area air defense weapons.

*g.* See figure 9 for brigade organization for the movement to contact.

### 60. Meeting Engagement

*a.* In the movement to contact, the brigade will frequently participate in a meeting engagement where the brigade not deployed for combat must engage an enemy, concerning which it has inadequate intelligence.

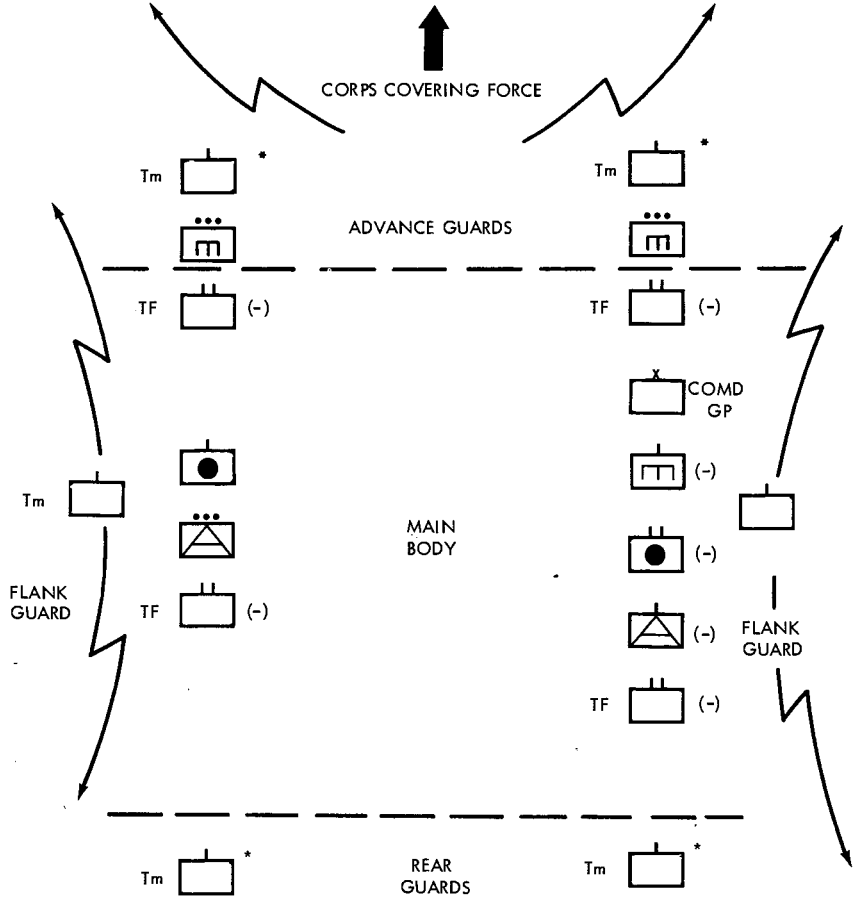
*b.* In each meeting engagement, the brigade commander is confronted with three possible courses of action:

(1) Attack piecemeal from march formation as fast as units can be brought into battle.

(2) Reconnoiter and contain the enemy force and defer decisive action until the bulk of his force can be committed in a coordinated operation, either offensively or defensively.

(3) Attempt to break contact and avoid or bypass the enemy force.

*c.* The paramount objective of the commander fighting a meeting engagement is to seize and retain the initiative. If he retains the initiative, he may adopt any of the three principal courses of action mentioned above that will contribute most effectively to the accomplishment of his mission. Without the initiative, he can only react to the enemy's actions.




* In this case the advance guard for each column is furnished by the lead battalions and the rear guard by the rearward battalions on each axis. Brigade controls the flank guards directly and controls the advance and rear guards through the battalions concerned. Artillery observers are with the lead companies. The location of the artillery units shown are for an initial passage of lines. Once artillery units begin to go into firing positions, they will disregard their initial locations and move where they can best support the operation. Air defense elements are interspersed along both columns.

***Figure 9. Type organization for brigade in movement to contact (multiple columns).***

## Section IV. CONDUCT OF THE ATTACK

### 61. General

*a.* The discussion in this section is broad in nature and applies generally to all attacks. Conduct of the attack under various forms

of maneuver and special conditions are discussed in succeeding sections of this manual and in FM 61–100.

*b.* In all types of attack, flexibility and speed of maneuver, adequate fire support, and timely decisions from command are required. This is particularly important in operations against an enemy who possesses equal mobility and nuclear firepower.

*c.* A successful attack demands the best effort of all concerned. Aggressive leadership, proper staff supervision, well-trained troops, high morale, and esprit are all essential to success.

*d.* The speed, armor protection, and mobility of tanks and mechanized infantry must be exploited to permit infantry-tank task forces to close with and destroy the enemy. Infantry remain mounted in carriers during movement and dismount only when required to do so by terrain conditions and enemy action or troop disposition.

*e.* Dismounted attacks must be time-phased more slowly than mounted attacks. However, the ability of the infantry to maneuver over difficult terrain makes it possible to use avenues of approach which may gain the advantage of surprise. Tanks are used to support the advance of dismounted infantry.

*f.* When suitably reinforced with Army aircraft the brigade can operate relatively independently of the terrain influences that restrict surface operations (para 144–148).

## 62. Phases of the Attack

*a.* Generally, the attack is planned and executed in three phases:

(1) Preparatory.
(2) Conduct.
(3) Consolidation and reorganization.

*b.* In the brigade, subordinate elements often conduct different phases simultaneously; this requires close coordination and staff supervision by the brigade to insure that the concept of the brigade operation is carried out as planned.

## 63. Preparatory Phase

*a.* During this phase, preliminary actions such as movement to assembly areas and resupply and refueling operations are completed.

*b.* If a fire preparation is to be used, it is initiated during this phase. Immediate damage assessment of nuclear and chemical strikes is made, and radiation detection teams report the radiation level so it can be compared against the troop-safety requirements set by the commander.

*c.* Feints and demonstrations may be conducted during this phase as part of the deception plan.

*d.* Troops begin moving forward from assembly areas into attack position, if used, so they cross the line of departure at the prescribed time. Preparatory fires are exploited to cover this movement. Normally, the brigade attacks from widely dispersed assembly areas, massing at the last possible moment to avoid presenting targets for enemy fire.

*e.* Intelligence activity, particularly ground and aerial surveillance, is intensified to detect the enemy's reaction to the preparatory fires, to the movement of troops, and particularly to any feints, demonstrations, or other deceptive measures.

## 64. Conduct Phase

*a.* Supporting fires continue in support of the attack as units cross the line of departure. Battalion task forces move forward maintaining dispersed formations, massing only to the extent required to overcome resistance.

*b.* Enemy forces which, if bypassed, could jeopardize the accomplishment of the mission are destroyed. Unless directed otherwise, brigade units bypass, destroy by fire, or contain other enemy forces to permit the rapid advance of the brigade to seize the final objective. Bypassed enemy troops are reported to higher headquarters.

*c.* At the brigade level, the attack is conducted as a series of rapid advances and assaults, and Brigade units are maneuvered to provide as much mutual support as possible.

*d.* Priority of supporting fires is shifted in coordination with changes in the scheme of maneuver. Whenever possible, the enemy is destroyed by fire alone, either nuclear or nonnuclear.

*e.* The reserve moves by bounds or at a prescribed distance behind attacking units from which it can move rapidly to points of probable employment. The reserve maintains dispersed formation, making full use of available concealment and cover. Whenever possible, its long-range firepower is used to support the attack. The reserve should be committed intact at the decisive time and place. The brigade commander seeks opportunities which can be exploited by the reserve for decisive results. Although the reserve may be used to mop up bypassed resistance, to augment flank or rear security units, to assist in covering gaps, or defeat counterattacks, its primary role is to insure the availability of a force which can achieve decisive results. The brigade commander reports commitment of the reserve to higher headquarters and reconstitutes a reserve from his own force at the earliest prac-

ticable opportunity or requests additional units from division. If the attack is prolonged, reserve units are rotated for rest, maintenance, and resupply.

*f.* During the assault on the final objective, all resources of the brigade are committed if required. Units proceed beyond the final objective to maintain contact with the enemy and to secure and defend avenues of enemy approach into the objective. Minimum forces are left on objectives to defend them, and the remainder of the brigade disperses as much as possible. Fires are shifted to assist in the retention of the objective and are placed on likely avenues of approach for an enemy counterattack. The brigade makes necessary preparations to continue the attack.

*g.* If the attack is discontinued or if the brigade reverts to division reserve, it may move into dispersed assembly areas or assume a defensive posture.

*h.* During the attack, the brigade trains (or elements) move forward to insure that logistical support for the attack is adequate.

## 65. Consolidation and Reorganization Phase

*a.* The purpose of consolidation and reorganization is to prepare the attacking force for future action. When possible, the seizure of the objective should be followed by immediate continuation of the attack or exploitation of success obtained. Emphasis is placed on security, resupply, and reorganization. Consolidation and reorganization should never interfere with maintaining the momentum of the attack.

*b.* Upon seizure of the objective, small pockets of enemy resistance are cleared as rapidly as practicable. Consolidation of the objective may be facilitated through the use of boundaries to delineate areas of responsibility and contact points to designate where units will coordinate the organization of the position.

*c.* If the attack is discontinued, consolidation and reorganization is more complete. Trains are displaced forward, equipment is repaired or evacuated, and personnel replacements are sent to units. Casualties who could not be evacuated during the attack are transported to supporting medical facilities, and necessary changes are made in task organization.

*d.* Preparations are made to resume the offensive when so directed.

## 66. Enemy Reaction to the Attack

The enemy can be expected to react to the attack with all of the resources at his command. Every effort must be made to deceive

him as to the location of the main attack. His reaction may take the form of counterattacks supported by nuclear weapons. The brigade plan of attack and its execution must avoid massing the brigade so that it would present a lucrative target for enemy nuclear attack.

### 67. Command

The brigade commander places himself where he can best influence the action and where the impact of his presence has the greatest effect. He keeps informed of the situation and insures that his staff is in continuous contact with subordinate units. He shifts priority of fires and maneuver units as required. He uses his reserve to influence the action. He decentralizes control to subordinate commanders to the greatest extent possible.

## Section V. PENETRATION

### 68. General

*a.* In the penetration, the attack passes through the enemy's principal defensive position, ruptures it completely, and neutralizes or destroys enemy forces in order to break up the continuity of his defense and facilitate future offensive operations. The divided enemy forces are then destroyed in detail, and mobile forces exploit through his rear area.

*b.* Penetrations (fig. 10) are conducted in three stages: rupture of the enemy's forward defensive position, widening and securing this gap, and seizing and controlling objectives which destroy the continuity of the enemy's defensive position. While these stages are usually conducted in sequence, essentially they are tasks which must be accomplished before a successful penetration can be completed. All three stages may be conducted simultaneously; they frequently are when nuclear weapons and airmobile forces have been allocated to the brigade. In such an event, nuclear weapons can be employed to create the gap or widen and secure its shoulders. Mechanized or motorized battalions exploit the effects of nuclear fires to linkup with airmobile units which have seized objectives in the enemy's rear.

*c.* Infantry-heavy forces are best suited for the first two phases, and tank-heavy forces for the rapid movement through the gap to seize the final objective or to linkup with airborne forces. The airborne brigade has an excellent capability for airmobile operations during phase three.

*d.* The penetration of a well-organized position requires a preponderance of combat power and continued momentum of the at-

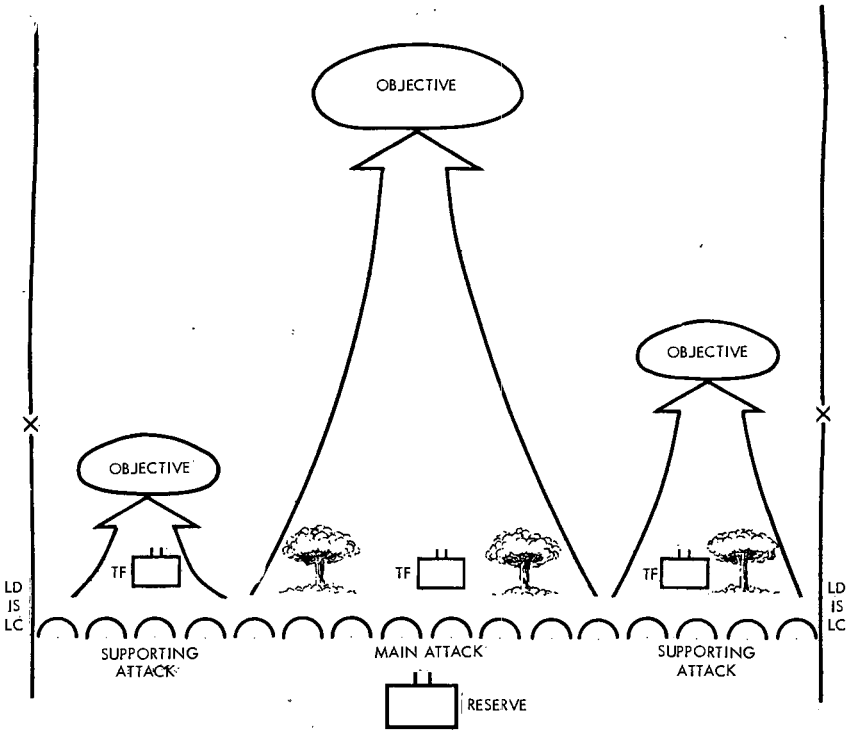



*Figure 10. Brigade conducting a penetration.*

tack. The attack must move rapidly to seize objectives which destroy the continuity of the defense. If the attack is slowed or delayed, the enemy is given time to react. If the rupture is not made sharply and rapid seizure of the objectives accomplished, the attack may resemble a frontal attack. This affords the enemy an opportunity to fall back intact on his routes of communication, thus avoiding destruction.

## 69. Basic Considerations

*a.* The penetration is adopted as the form of maneuver when dictated by the brigade's mission, or it is selected by the brigade commander when one or more of the following conditions exist:

(1) The enemy's flanks are unassailable.
(2) The enemy is over extended and there are weak spots in his defenses.
(3) Terrain and observation are favorable.
(4) Ample fire support (particularly nuclear) is available.
(5) The attacker has the preponderance of combat power.

*b.* In the penetration, intermediate objectives are usually assigned to insure accomplishment of the first two stages of the operation, i.e., objectives which are required to rupture the enemy's forward defense and those required to widen and secure the gap in the enemy's line through which the main attack will pass. The brigade penetration objective is selected to seize key terrain in the brigade zone located at a depth within the enemy defenses at least to a line of his regimental reserves. Seizure of this key terrain will normally eliminate the enemy's capability to counterattack successfully with his forward regimental reserves.

*c.* The main attack should be made over the best terrain and on a relatively narrow front. Its objective should be the final objective. In some cases, the main attack force is not committed until supporting attacks and/or nuclear fire have effected the rupture of the enemy's position and provided a gap. The mechanized battalion task force is ideal for this role. The bulk of the armor attached to the brigade should be used to move through the gap to seize the final objective.

*d.* Supporting attacks may be used to widen the gaps, to prevent the enemy from disengaging, and to destroy him in place. They are directed toward seizing or controlling terrain on the shoulders of the penetrations to enable the main attack force to move through the gap.

*e.* The reserve should be kept mobile and positioned where it can exploit initial success. Frequently, it will pass through forces making the initial assault or assist in seizing or destroying the final objective.

*f.* Controls imposed by the brigade for a penetration usually include a line of departure, time of attack, zones, assembly areas for major subordinate units, objectives, and axis of advance.

## 70. Fire Support

*a.* The penetration is normally preceded by preparatory fire which neutralizes enemy positions, limits enemy ability to react against the attack, and covers the movement of attacking units.

*b.* Nuclear weapons contribute to the effectiveness of fire support; however, the effects of nuclear weapons must be considered in relation to the scheme of maneuver. It is frequently preferable to use these weapons on the flanks rather than in the area of the main attack.

*c.* Use of toxic chemical agents for nonpersistent effect is a rapid means of expediting rupture of the position. They increase the friendly combat superiority in the area without producing obstacles.

*d.* Fires are planned to widen the shoulder of the penetration and to neutralize enemy efforts in holding or forcing the shoulders of the penetration.

*e.* Fires are planned to neutralize enemy reserves, to prevent movement of enemy forces into or out of the area of operations, and to destroy any targets which seriously threaten the accomplishment of the mission.

*f.* Enemy forces isolated during the rupture of the position may be reduced by fire.

## Section VI. ENVELOPMENT

### 71. General

In the envelopment (fig. 11), the main or enveloping attack passes around or over the enemy's principal defensive positions to seize objectives which cut his escape routes and subject him to destruction in position from the flank or rear. Supporting attacks hold the enemy in position during the advance of the enveloping attack. The envelopment forces the enemy to fight in two or more directions concurrently to meet the converging attack.

### 72. Basic Considerations

*a.* Ground envelopment requires that the enemy have an assailable flank, or that an assailable flank be created by massed nonnuclear or nuclear fires, a penetration, or that the enemy dispositions permit infiltration of his position. Aerial envelopment requires suppression of enemy air defense fires or that enemy dispositions and capabilities be unable to materially interfere with the flight of the airmobile force.

*b.* The brigade may use the envelopment as the form of maneuver for its own attack or may take part in an envelopment being made by the division or larger force. In the first instance, one or more battalions of the brigade make the fixing attack while other brigade units pass around the enemy's flank to seize objectives in the rear. When part of a division envelopment, the brigade may be given the encircling role or the supporting role of fixing the enemy in place.

*c.* Envelopments require an appropriate balance of forces for the main and supporting effort. Frequently, the forces holding the enemy in position are economy of force elements, with greater combat power allocated the enveloping force. The holding force must, however, have sufficient combat power to keep the enemy fully occupied during movement of the enveloping force.

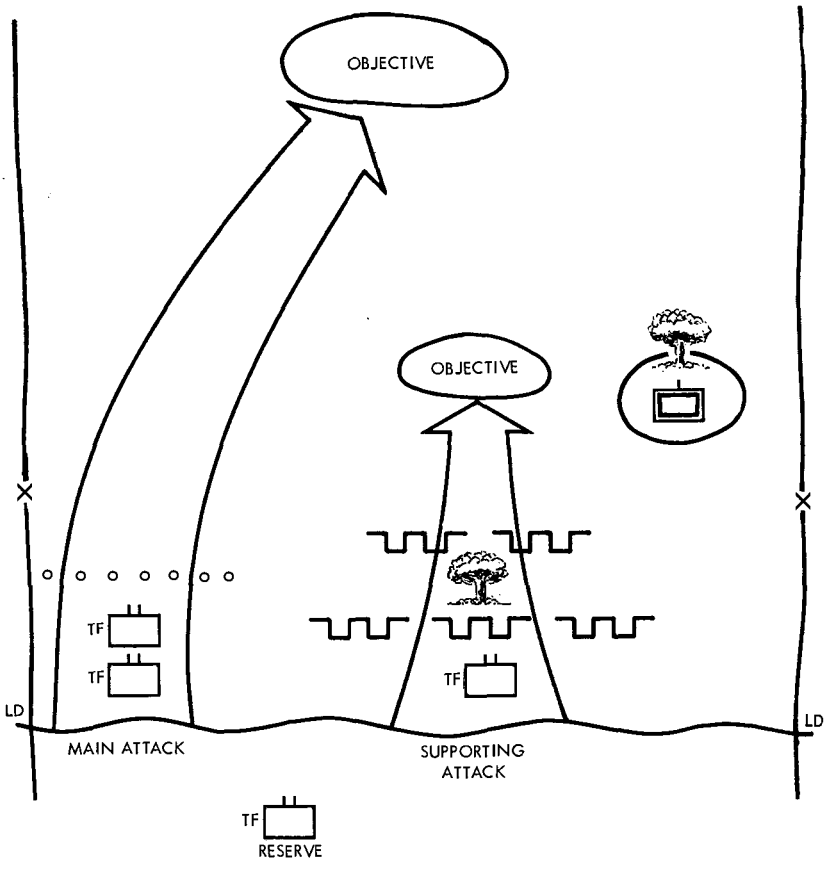



*Figure 11. Brigade conducting an envelopment.*

*d.* Airmobile forces may be assigned the mission of seizing or destroying objectives in the rear; however, if the enemy is defending in depth, such forces cannot land directly on objectives. In most cases, they must make their landings in undefended areas from which they will attack to seize their objectives.

*e.* If the enemy attempts to cut off the enveloping force or extend his flank beyond it, the brigade commander may elect to penetrate the enemy's overextending front. This takes advantage of the weakness offered by the enemy in reacting against the envelopment. An attempt to outflank the enemy's extension may lead to overextension of the division or a dangerous separation of the enveloping force from the supporting attack.

*f.* The brigade commander is alert to detect opportunities to exploit success with his reserve. These opportunities may be either in the area of the enveloping or supporting attack. When the reserve is committed, another is constituted as soon as practicable.

### 73. Control Measures

*a.* Minimum control measures are assigned to the enveloping force. The use of a zone of action may simplify control and coordination with an adjacent supporting attack. In some situations an axis of advance may be necessary to implement the commanders scheme of maneuver.

*b.* Limited objectives (generally close-in) are assigned to those forces making a supporting or fixing attack. The envelopment objective is located in the enemy's rear in a position to enable the encircling force to block the enemy's escape so he can be destroyed in place. Ideally, the envelopment objective is the brigade final objective for the operation. However, distances and other conditions often will require the brigade to envelop enemy forces by seizing intermediate objectives in proximity to the rear of initial supporting attack objectives. In this case, continuation of the attack to the brigade final objective may employ another envelopment or other form of maneuver. Intermediate objectives en route to the envelopment objective are not normally assigned to the encircling force.

### 74. Fire Support

Because of the requirement for secrecy, limited targets and inability of local forces to impede the attack in the area of the enveloping force, a preparation might not be fired in support of the enveloping force. If fired it is violent but of short duration. The supporting attack(s) may be preceded by a preparation.

## Section VII. TURNING MOVEMENT

### 75. General

In the turning movement the attacking force passes around or over the enemy to seize objectives deep in his rear thereby forcing him to abandon his position or to divert major forces to meet the new threat. This enables the attacker to meet the enemy on ground of his own choosing.

### 76. Mobility

Since the force executing the turning movement is usually out of supporting distance of other elements of the force it must be sufficiently mobile and strong to operate independently. Under most conditions infantry battalions will require motorization, mechanization or air mobility when acting as part of a turning force. The cross attachment of tanks is desirable.

### 77. Supporting Forces

A supporting attack may be required to fix the enemy; however, a turning movement need not always be accompanied by a

supporting attack. Sufficient combat power must be applied by a holding force against the enemy force to prevent its interference with the turning force. The application of this combat power may be in the form of a supporting attack or of a screening operation. Because the turning force and the holding force frequently operate beyond mutually supporting distance, each force must have sufficient combat power and mobility to avoid defeat in detail.

## Section VIII. INFILTRATION

### 78. General

*a.* Infiltration is an operational technique which may be employed with all forms of maneuver. The purpose of infiltration is to surprise the enemy by penetrating his position by stealth and deploying forces in his rear to conduct or assist in the conduct of decisive tasks. These tasks may be:

(1) To seize key terrain (main attack) in conjunction with supporting attacks.

(2) To destroy the enemy or his vital installations to assist the main attack by attacking his reserves, fire support delivery means (especially nuclear) and key command, communication, and logistical installations.

*b.* Gaps in the enemy lines, rough or difficult terrain, and poor conditions of visibility facilitate infiltration.

*c.* Although infiltration best lends itself to dismounted action, under certain circumstances aircraft as well as ground vehicles can be used effectively to expedite movement of the infiltrating forces.

### 79. Basic Considerations

*a.* Execution of a successful infiltration requires terrain or enemy dispositions, or both, that permit movement of forces through initial enemy defenses without detection.

*b.* The brigade retains direct control over an infiltration when the infiltrating force is of battalion size or larger. Otherwise, control is decentralized.

*c.* Control measures must be in considerable detail since the infiltration is conducted by small groups during periods of reduced visibility and often through difficult terrain.

*d.* Linkup plans must provide adequate recognition means and unity of command once the linkup has been made.

*e.* Within the area of infiltration, a series of infiltration lanes of sufficient width to permit the infiltrating groups to move by

stealth are designated. Infiltration lanes (in conjunction with the coded designation of infiltrating groups and their probable sequence of movement), checkpoints, and phase lines provide a means of reporting the progress of the operation and of coordinating fires with movement of the groups. Other control measures used are attack positions, objectives, and rallying points or areas.

*f.* Adequate communications must be provided for use within the infiltrating unit and for use between that unit and the controlling headquarters.

*g.* Units making an infiltration usually attack only with individual weapons and hand-carried, crew-served weapons. Provision must be made to provide adequate fire support to infiltration units once they close on the objective. Plans should call for the air delivery of heavier weapons to these units in the objective area to provide additional support for subsequent operations.

*h.* Fire support planning includes provisions for battlefield illumination. Supporting fires are also planned to cover and assist movement of infiltration forces.

## Section IX. RECONNAISSANCE IN FORCE

### 80. General

*a.* A reconnaissance in force is an attack to discover and test the enemy's dispositions and strength or to develop other intelligence. Although its primary aim is reconnaissance, it may uncover weaknesses in the enemy's disposition which may be promptly exploited with success.

*b.* The brigade may conduct a reconnaissance in force as a unit, or elements of the brigade may conduct a reconnaissance in force on a limited scale for the brigade.

*c.* When the availability of nuclear weapons permits, the principal efforts of the brigade may be a widespread and continuous reconnaissance in force. Under these conditions, the enemy reaction may result in enemy forces presenting remunerative nuclear targets. The maneuver elements then complete their destruction. The reserve is held ready to replace or relieve maneuver elements or to exploit opportunities which may develop.

*d.* Mechanized and armored brigades are excellent reconnaissance in force units. The infantry and airborne brigades operating dismounted can conduct a reconnaissance in force of limited depth. When reinforced with ground transport or aircraft, dismounted units can extend their reconnaissance over a wide front.

## 81. Basic Considerations

*a.* The reconnaissance in force normally develops information more rapidly and in more detail than other reconnaissance methods. In arriving at a decision to reconnoiter in force, the commander considers the—

(1) Extent of his knowledge of the enemy situation and the urgency and importance of the additional information sought.
(2) Efficiency and speed of other information collection agencies.
(3) Extent to which his plan of action may be divulged by the reconnaissance in force.
(4) Possibility that the reconnaissance may lead to a general engagement under unfavorable conditions.

*b.* When information is sought regarding a particular area, the reconnaissance in force is planned and executed as an attack with a limited objective. If the enemy situation along a front is to be developed, the reconnaissance in force is a phased advance under mission-type orders, employing strong aggressive probes to determine the enemy situation at critical points.

*c.* The reconnoitering force must be strong enough to cause the enemy to react to the attack, thus disclosing his location, strength, planned fires, and planned use of reserves. The size of the force depends upon the mission of the brigade and the situation. The brigade commander may use a force as small as a company team or as large as a battalion, retaining sufficient reserves to exploit enemy weaknesses.

*d.* Plans must provide for exploitation of enemy weakness and the extrication of the force in the event it becomes decisively engaged.

*e.* Upon completion of its reconnaissance the force may remain in contact with the enemy or it may withdraw. If the reconnaissance is to be followed by further attack, other units pass through the reconnoitering force in the attack or it may itself continue the attack.

# Section X. EXPLOITATION

## 82. General

*a.* Every attack should have as its objective destruction of the enemy and, failing this, the creation of conditions which permit exploitation and the final phase of exploitation, pursuit. Exploitation is a decisive phase of the offensive intended to destroy the

enemy's ability to reconstitute and conduct an organized defense or to withdraw in an orderly manner. It permits maximum destruction of the enemy and his resources at minimum cost to the attacker.

*b.* At brigade, the exploitation may call for an advance of many kilometers over a broad front. Such operations may be conducted employing techniques of the movement to contact.

*c.* The exploitation normally occurs after a successful assault and seizure of the brigade objective. With adequate nuclear support, however, the exploitation may be launched in conjunction with the initial assault.

## 83. Basic Considerations

*a.* Since the exploitation is the continuation of an attack, commanders at all echelons must be prepared to exploit and pursue at any time the opportunity is presented.

*b.* Objectives deep in the enemy rear should be selected by higher headquarters. Their seizure should deny the enemy routes of escape, encircle him, and destroy his communication centers and logistical installations.

*c.* Organization for combat should provide for tank-heavy forces composed of tanks and mechanized or motorized infantry. Artillery and other combat support units should be attached to the brigade for the exploitation. Full use should be made of tactical air for fire support and reconnaissance.

*d.* Exploitation may be initiated on order, or upon reaching prescribed objectives or phase lines. Indications favoring exploitation include a decrease in enemy resistance, an increase in captured prisoners, an increase in abandoned materiel, and the overrunning of artillery, higher unit command posts, signal installations, and supply dumps.

*e.* Exploiting forces advance rapidly and arrive at their objectives with maximum strength. The exploiting force clears only as much of its zone as is necessary to permit its advance to continue. Enemy forces that interfere or can interfere with accomplishment of the mission are destroyed. Exploiting forces bypass, or contain with minimum forces, enemy resistance of insufficient strength to jeopardize the accomplishment of the mission. Bypassed forces are reported to higher headquarters.

*f.* There are two general methods by which the brigade commander can exploit the success of the brigade. Whichever method the commander chooses to use is implemented rapidly.

(1) *Exploit with committed forces.* In this method committed task forces are committed to exploit their own

success. This method is generally indicated when the attacking echelon has accomplished its mission and is the force most readily available to continue the advance against the enemy. It may become necessary to reorganize and resupply these forces on the move.

(2) *Exploit with reserves.* In this method the brigade reserve is committed by passing it around, or through, the forces which have achieved the success. This method is generally indicated when the attacking echelon still has essential tasks to accomplish, is still actively engaged with enemy forces, or will require reorganization before it can continue the advance. Use of this method requires that the reserve be properly organized for combat and be in a position to be readily committed.

*g.* Decentralized execution is characteristic of exploitations. Mission-type orders are given to subordinate commanders. Minimum control measures are used.

*h.* In the exploitation, nuclear weapons are used principally on targets of opportunity. These weapons are used to eliminate pockets of resistance, destroy hostile reserves, and seal enemy escape routes. Chemical agents are also effective means of blocking defiles.

*i.* Logistical support, particularly forward movement of class III and V, may be the limiting factor in determing how far the brigade may exploit or pursue the enemy. Portions of the brigade trains accompany the battalion task force.

## Section XI. PURSUIT

### 84. General

*a.* The purpose of a pursuit is destruction of the enemy force. A pursuit may be launched against a locally defeated or disorganized enemy and, if aggressively pressed, may result in decisive defeat of the entire enemy force. The brigade commander must be alert for any sign of the enemy's inability to maintain organized resistance, report of such facts to higher headquarters, and maintain relentless pressure on the enemy force facing him. The pursuit is normally initiated upon approval of higher headquarters.

*b.* There are two general methods of conducting the pursuit.

(1) *Direct pressure.* In this method the direct pressure force maintains relentless pressure against the retreating enemy. The mission of this force is to prevent enemy disengagement and subsequent reconstitution of the de-

fense, and to inflict maximum casualties. This method may be used by all types of forces, including dismounted infantry. It is a frontal attack, with the forces advancing with maximum combat power forward on a broad front.

(2) *Direct pressure in combination with an encircling force.* In this method the direct pressure force maintains relentless pressure on the retreating force while a highly mobile encircling (enveloping) force cuts the enemy's line of retreat to intercept and destroy him. This method requires that all of the force or at least the encircling force be provided with a means of increasing their relative mobility over the enemy (air or ground vehicles). Double envelopment of the retreating enemy force or its separate elements is attempted whenever conditions permit.

## 85. Basic Considerations

*a.* Once the pursuit is ordered, the commander presses the attack with all available resources. Maximum use is made of Army aviation. Local enemy defenses are overrun, and isolated pockets of resistance are bypassed or destroyed by fire. The main enemy force is prevented from organizing an effective defense by the presence of the pursuer.

*b.* The brigade commander may designate terrain objectives, phase lines, or checkpoints to control a pursuit. In assigning control measures for a pursuit, subordinate commanders are given as much freedom of action as is consistent with security and maintenance of command and integrity.

*c.* Major subordinate elements are made as self-sufficient as resources will permit.

*d.* Fire support elements are placed well forward to insure that fire can be delivered deep into enemy position and on enemy retreating columns. Close air support fires are used to interdict routes of movement of enemy columns.

*e.* Greater risks may be taken to achieve decisive results. The enemy inability to react reduces the need for mutual support. This inability to react also enhances security.

*f.* Adequate preparation is made for combat service support. Class III consumption is particularly high. Air transportation may be used for prompt delivery of supply to forward units. Maximum use is made of captured enemy material, particularly transportation and stocks of supplies.

## Section XII. NIGHT COMBAT

### 86. General

*a.* Night combat at the brigade level will be frequent and should be considered an integral part of all operations. Reduced visibility at night hampers the enemy's ability to defend, and often attacks at night give the attacker a distinct psychological advantage. Surprise may often be achieved at night when it is impossible during daylight operations. Improved night-observation devices enhance the chance for success.

*b.* Night attacks may be used to continue the momentum gained by a successful daylight attack, to gain surprise, to accomplish massing under the cover of darkness, and to reduce the effectiveness of enemy fires.

*c.* Control is more difficult at night; therefore, more restrictive control measures must be used.

*d.* There are two methods for conducting a night attack: illuminated and nonilluminated. The particular method employed depends on such tactical considerations as the enemy strength and degree of preparation of his positions, his security measures, the terrain, light conditions and means available. The nonilluminated attack is made to achieve surprise in closing with the enemy before he discovers the attack. The illuminated attack is made when the enemy position is strong, when the possibility of achieving surprise is remote, and where control of units requires use of daylight control methods. Either method of night attack may use fire support including a preparation. The decision on fire support is the same in the night attack as in the daylight attack. Normally, a nonilluminated attack is not supported because this may indicate the brigade intentions.

### 87. Basic Considerations

*a.* Plans for night attacks are more detailed and less flexible than for daylight operations. The emphasis is on simple, easy-to-execute formations and maneuver. Planning is centralized and execution is decentralized.

*b.* As in an infiltration, secrecy and stealth may often be essential to success. Deceptive measures must be taken to keep the enemy from discovering the time and direction of attack. Noise discipline must be enforced.

*c.* Close combat is more important at night than during daylight attacks because of the decreased ability to use aimed fire and because the coordination of supporting fires with the maneuver of troops is more difficult.

*d.* Although well-trained units can execute night attacks on short notice, planning and troop-leading procedures for a night attack are generally more extensive and time-consuming than for a similar operation conducted during daylight. Brigade planning should allow subordinate commanders and staffs adequate time for daylight reconnaissance, and for preparations in assembly areas. Troops should be thoroughly briefed on the final plans.

*e.* Time patterns are avoided so the enemy cannot predict the time of attack. Often, an attack is made late at night so initial objectives can be seized by daylight and the attack continued at that time. If the objective is relatively deep or the brigade mission requires immediate continuation of the attack, the attack may begin early at night and continue to the final objective during darkness. Also, if the objective is to be seized and held, the attack may also begin early at night.

*f.* Objectives for night attacks should be easily recognized at night. Approaches which have easily recognized landmarks should be selected. More open avenues of approach may be used at night because of the added concealment of darkness.

*g.* The brigade assigns a zone of action for each subordinate element. The line of departure specified by brigade should be easily recognized on the ground, and, if the night attack involves a passage of lines, it may be marked in advance by friendly troops.

*h.* Preparatory fires are not normally used in a nonilluminated night attack. Every effort is made to maintain the existing pattern of fires prior to and during the attack. In determining whether a preparation will be fired, its probable assistance to the maneuver force must be weighed against the effects of tactical surprise stemming from an attack by stealth. If a preparation is not fired, on-call fires are planned to be used in the event surprise is lost. In addition to normal fires, fires are planned to cover the withdrawal of the attacking force, to box in the area of the attack, and to cover the reorganization on the objective. Normally, on-call nuclear fires are not used because of the difficulty of protecting troops from the dazzle effect of a nuclear detonation.

*i.* Illumination is planned and may be used throughout the attack or on an on-call basis after secrecy has been lost. Plans should include all types of illumination. These include tank searchlights, illuminating shells, and illuminants delivered by aircraft. Normally, the brigade commander delegates authority to

the battalion to initiate the use of illumination, although brigade carefully coordinates its use to prevent illuminants used in one zone from interfering with operations in another zone.

*j.* Listening silence on radios is maintained as long as possible for secrecy, and primary reliance is placed on the use of wire. Once the attack is discovered, normal communciations will be used. Prearranged pyrotechnic signals may also be employed.

## 88. Conduct of the Night Attack

*a.* The brigade commander and his staff operate well forward in order to assist in maintaining close control.

*b.* Brigade assists in the movement of battalions forward from assembly areas to attack positions by providing control personnel at key points along the routes.

*c.* The brigade elements remain in column formation for as long as possible to facilitate control, preferably until the probable line of deployment is reached.

*d.* The reserve is positioned well forward. In dismounted attacks, it may at times move at a fixed distance behind the attacking elements rather than by bounds. The plans for the reserve should be made in great detail to permit its commitment at night, when required. Preferably, it is committed at considerable distance from other attacking units to avoid intermingling and confusion. The reserve should be composed of tanks and infantry since surprise will usually have been lost when it is committed, and it should possess a high degree of mobility.

*e.* Measures taken for flank and rear security must provide for patrols to search for, uncover, or contain bypassed units and detect enemy counterattacks.

## 89. Reference

See FM 7–20 for details on employment of the battalion in offensive operations.

# CHAPTER 5
# DEFENSE

## Section I. GENERAL

### 90. Purpose

*a.* The defense is adopted only as a temporary measure until such time as the defender can assume the offensive. During conduct of the defense, the defender strives to gain and maintain the initiative. The attacker is continually harassed by fires and offensive maneuver when appropriate. The defender uses all means available to detect an enemy weakness and maintains sufficient flexibility in his planning to exploit those that occur. All resources are employed to inflict maximum destruction on the enemy force.

*b.* The brigade defends to gain time in preparation for subsequent offensive operations; to economize in force; to force the enemy to mass; to exhaust an enemy force; to deny a superior enemy force entry into an area; or to force an attacking enemy into an area where he will be vulnerable to destruction.

### 91. Capabilities

The brigade is capable of conducting a defensive operation as part of a larger force or in an independent or semi-independent role. Its capabilities are dictated by resources attached to it, placed in support of it, or otherwise made available to it. Methods of conducting the defense are based upon the capabilities of attached and supporting elements. The brigade participates in a mobile defense as part of a larger force by conducting an area defense, a delaying action, a combination of area defense and delaying action, or by executing offensive maneuver to destroy an enemy penetration. Ability to participate in a mobile defense depends on the mobility of supporting and attached units. Mechanized or motorized infantry, supported by tanks, are required for fixing forces, while the brigade in the reserve should consist of tank-heavy forces supported by mechanized infantry.

### 92. Fundamentals of Defense

Defensive operations are characterized by detailed planning and the degree of centralized control dictated by the type of defense

conducted. Within limits of security, the command should be advised of the purpose and probable duration of the defensive operation and kept advised as the situation changes. Regardless of the planned duration of the defense, improvement of the defensive position is continuous.

*a. Proper Use of Terrain.* Proper evaluation and organization of the brigade defensive area is essential to maximum use of available forces. That portion of the brigade area which favors the defender is lightly manned in favor of stronger forces in areas that afford the attacker an advantage. The natural defensive characteristics of the terrain are improved with assistance and advice from attached engineers and by artificial obstacles, with due consideration for offensive maneuver and future operations. Use of minefields and other obstacles will vary with the brigade's mobility. Those terrain features which, if seized, will afford the attacker an advantage are strongly defended. Above all, the commander analyzes the terrain to determine the decisive area(s) the retention of which is essential to the accomplishment of his mission.

*b. Security.* The brigade commander insures, through early warning of pending enemy actions, that he has necessary time to react to an enemy threat.

*c. Mutual Support.* Consistent with accomplishment of the assigned mission and dispersion appropriate to the terrain, forces are placed to provide an exchange of defensive resources. Such resources may include fires, observation, or maneuver elements. The capability of mutual support may be attained laterally or in depth. Control of gaps is effected through surveillance, obstacles, prearranged fires, and provision for maneuver elements to exploit or reinforce fires. Gaps are normally accepted between battalions rather than companies.

*d. All-Round Defense.* In defensive planning, the brigade commander retains the capability to defend against enemy ground and air attacks coming from any direction. Principal forces and available supporting weapons are positioned to detect, engage, and destroy enemy ground forces and aircraft along their most likely avenues of approach, although provisions are also made to meet these attacks from other directions. Plans should be sufficiently flexible, and reserves should be positioned to permit destruction of enemy guerrilla forces or forces delivered by air into the area. Terrain permitting, all-round defense is most economically insured by proper positioning of security forces and provisions of a highly mobile reserve capable of traversing the entire defensive area. In areas that are not accessible to vehicle-mounted forces,

security elements must be employed in sufficient strength at critical points to defeat or contain enemy forces and prevent disruption of supporting operations of the defender.

*e. Defense in Depth.* Units must be disposed in depth forward of the decisive terrain which must be retained to accomplish the brigade mission. Adequate depth is essential if the enemy is to be stopped and ejected by reserves in the event he forces entry into the brigade battle area. Accordingly, the brigade commander provides for depth by locating the FEBA well forward of the terrain that must be held in order to accomplish the mission. The brigade commander also insures that fires are planned in depth throughout the battle area.

*f. Responsiveness.* The brigade commander must retain the ability to influence the conduct of the defense, both to counter the enemy's attack and to seize the initiative if the enemy exposes a weakness or commits a tactical error. Since the enemy has the choice as to when, where, and with what portion of his available forces he will attack, the defender positions his forces and plans fires and movement to meet the widest possible range of contingencies.

*g. Maximum Use of Offensive Action.* The mobile situations to be expected under nuclear or nonnuclear conditions will afford the defender many opportunities to destroy attacking forces by effective employment of spoiling attacks and counterattacks supported by nuclear or conventional fires. Defending forces must be alert to regain the initiative by offensive action, and must take maximum advantage of the mobility of attached mechanized and armored units. Aggressive patrolling, raids, spoiling attacks, and counterattacks are among the means by which the offensive spirit is maintained.

*h. Dispersion.* In the organization of the defense, the brigade commander disposes his forces to present the least remunerative target to enemy nuclear fires. Separation of units must be consistent with the capability of providing sufficient mass to accomplish the brigade mission and provide an offensive maneuver force on a timely basis.

(1) Terrain permitting, dispersion for a mechanized or motorized battalion acting as the reserve may be greater than for dismounted elements. The availability of helicopters will, on the other hand, permit a high degree of dispersion of foot elements notwithstanding terrain obstacles.

(2) Desirably, and if mobility permits timely massing, reserve battalion(s) may be positioned in company-size

groups at two or more locations to permit more timely employment in the counterattack role or to block multiple enemy avenues within the reserve area.

*i. Time Available.* The brigade commander considers the time available for planning and preparation in formulating his plan of defense. Close timing and careful selection of tasks to be completed are prerequisite to the successful conduct of a defensive mission. Every effort should be made to prepare the defense in advance of enemy action. The more time available to subordinate units and the better it is used, the more effective the defense will be. Defensive preparations expose troops to the risk of being detected by the enemy, and being subjected to his fires before the main attack begins. If time permits, those defensive preparations which cannot be concealed should be carried out at night. All available time is utilized in the preparation of a defensive position.

*j. Integrate and Coordinate Defensive Measures.*

(1) *Fire planning.* Maneuver and coordinated fires, nuclear, chemical and nonnuclear, are the principal means used to defeat an enemy assault forward of and within the defensive position. This planning should insure that maximum effective fire is brought to bear on the attacking forces, both ground and air, throughout the conduct of the defense. It includes the fires of all weapons of attached and supporting units. Maximum effort must be made to implement all possible active and passive measures for defense against hostile air attack and observation. Air defense considerations, such as the aerial threat, hostile routes of approach, air defense coverage, dissemination of early warning, and identification of friendly aircraft, must be taken into account in fire planning.

(2) *Barrier (obstacle) plans.* The defensive characteristics of the terrain are enhanced by an effective use of planned barrier systems including minefields, atomic demolition munitions (ADM), other artificial obstacles, and chemical agents. The advantages of these barriers (obstacles) must be exploited by the defending troops; however, care must be exercised in planning the barrier systems to avoid loss of freedom of maneuver by the defending units, particularly when mechanized.

(3) *Plan for defense against armor.* Armor is sensitive to terrain and obstacles. Further, when engaged in an assault or under fire, armor is normally "buttoned up" with consequent limited observation. The initial effort in

defense should be directed against destroying enemy armor. As the enemy approaches the FEBA, fires are planned to destroy accompanying or following infantry. Enemy armor that has penetrated into rear areas is best defeated by isolation from infantry, maximum use of natural and artificial obstacles, antitank defense in depth, and proper employment of antitank weapons by units occupying positions in rear areas. Local security of elements in rear areas should provide for antitank mines and obstacles covered by fire with antitank weapons integrated to cover the best approaches into the area.

## Section II. FORMS OF DEFENSE

### 93. General

The assigned mission establishes the method of operation and the consequent conduct of a defense. Essentially, a defense may be mobile with less regard to retention of terrain, a complete denial of entry to the area being defended, or (more often) a combination of both. Despite the nature of the operation, a defender must deny an attacker entry to terrain that precludes his destruction or permits it only in a costly operation. The basic forms of defense are the mobile and area defense (FM 61–100).

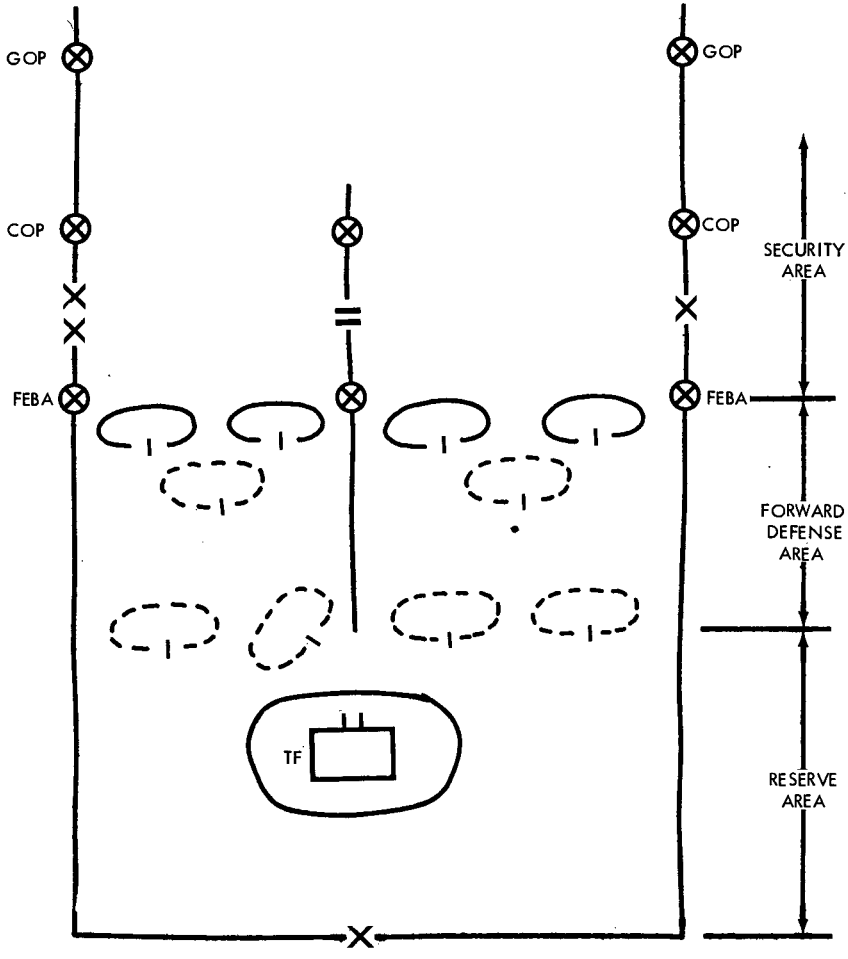
### 94. Brigade Defensive Roles

The brigade, when participating in a mobile defense, will be employed to control units in the division security area, forward defense area, or reserve area. Less frequently, when assigned to man forward positions, the brigade may defend in a part of the sector and conduct a delay in the remainder. In the role of division reserve, the brigade will be given the mission of providing depth to the division position by constructing blocking positions and preparing plans for and conducting offensive action to destroy an enemy penetration with all or part of the force. In an area defense, the brigade may be deployed in forward positions or as the reserve.

## Section III. DEFENSE AREAS

### 95. General

Defense areas include the security area, the forward defense area and the reserve area (fig. 12). The elements within these areas will vary in composition and strength as dictated by the




NOTE: RESERVE COMPANIES OF THE FORWARD BATTALIONS ARE MANNING THE COP.

*Figure 12. Brigade defense areas.*

mission, enemy capabilities, terrain upon which the defense is conducted, and the strength and capabilities of troops available.

## 96. Security Area

The security area extends from the FEBA and as far to the front and flanks as security elements are employed. The depth of this area may be limited by the presence of security elements from division or higher echelon to the front. As the security echelon, the brigade employs the combat outpost (COP). The brigade may

constitute the division general outpost (GOP), or the corps covering force. When so employed, it should be organized with mechanized or motorized infantry and tank units to provide the necessary mobility and firepower required by this type of mission.

*a.* The mission of the security echelon is to provide early warning of an enemy approach and (within its capabilities) delay, disrupt, and destroy enemy formations and deny him close ground observation of the forward positions. As additional missions, the security echelon locates positive and probable targets for the defenders and employs stay-behind forces to direct fires, provide information, and/or disrupt enemy operations.

*b.* The brigade security echelon may be employed from, and under the control of, forces occupying the forward defense area. When circumstances preclude this arrangement, the brigade security echelon is provided from the reserve either under control of the appropriate forward elements or under centralized control of the brigade.

*c.* The security echelon is composed of an appropriate balance of combined arms and is supported by fires from attached or supporting delivery means (FM 7–20).

### 97. Forward Defense Area

The forward defense area extends from the FEBA to the rear boundary of the forward committed battalions of the brigade. Forces occupy the forward defense areas along, or in proximity to, the FEBA. The mission assigned these forces is based upon the type defense being conducted. They may defend with the mission of denying the enemy entry to the main battle area or may delay to an area of the commanders' choosing pending delivery of fires and maneuver to destroy the enemy force.

*a.* At brigade level, the forward defense area is garrisoned by infantry and tank battalions attached to the brigade. Under certain conditions, other appropriate forces are employed on defensive positions within their capabilities.

*b.* Gaps in the defensive area may be covered by surveillance directly under control of the brigade or under control of an adjacent element. Battalions position forces in the forward defense area based on the mission and the relative defensibility of the terrain.

### 98. Reserve Area

The reserve area is that portion of the battle area from the rear of committed forces to the brigade rear boundary.

*a.* The brigade reserve is composed of those uncommitted forces retained for employment at a decisive time and place.

*b.* Reserves are positioned to provide access to any part of the battle area. They routinely prepare blocking positions to add depth to the battle position.

## Section IV. DEFENSE PLANNING

### 99. General

In planning the defense, the brigade commander seeks to correlate the terrain to resources available in relation to discharge of his mission. The defender has the initial advantage in that he reconnoiters the terrain and selects the area to be defended. Additionally, he may dispose his forces to cause the enemy to mass and present a target in areas covered by prearranged fires. On the other hand, the attacker has the advantage of electing the time and place for his offensive maneuver.

*a.* The plan of defense includes the scheme of maneuver and the plan of fire support to include air defense. These are developed concurrently and integrated to insure maximum use of available resources.

*b.* Defensive planning is continuous. Contingency planning is conducted with the basic plan, and transition to an alternate plan is considered in conduct of the defense.

*c.* Plans must be simple and flexible, and their execution must be within the capability of forces known to be available at the time the plan is to be executed.

### 100. Sequence of Planning

In developing plans, the fundamentals of defense are considered throughout the process. They are closely related and are an integral part of the planning process.

*a.* In the initial stages of planning determination is made as to the basic form of defense to be adopted. The form of defense may be designated by higher headquarters or the decision may be left up to the brigade commander. Considerations which affect the commander's choice of the form of defense include the mission, the enemy, the terrain, and troops available.

*b.* Planning for the defense is initiated with the receipt of the mission. The brigade commander and his staff follow a logical sequence to complete their command and staff actions.

(1) First, the mission is analyzed to insure that all tasks, both specified and implied, are considered.

(2) Next, the staff provides current information to the commander to assist him in formulating his planning guidance.

(3) The brigade commander considers the information presented by his staff. Based on this information, his knowledge of the situation, a study of the mission and map, application of his professional experience and judgment, he formulates and issues his planning guidance. The guidance may be in general terms or, if the particular situation requires, in greater detail. It may include the possible courses of action (indicating a general trace(s) of the FEBA or location of forces) which the commander desires the staff to consider in conducting their reconnaissance and formulating their estimates.

(4) After receipt of the commander's planning guidance, the commander and staff conduct a reconnaissance of the area to develop the courses of action and to verify their map analysis in order to complete their individual estimates.

(5) Upon receiving the staff recommendations, the commander completes his own estimate and arrives at his decision. Normally, this action will be accomplished rapidly; however, there may be times when the commander will consult with commanders of subordinate battalions prior to announcing his decision. The decision is an expanded statement of the course of action selected as a result of his estimate and includes the trace of the FEBA, designation of the forces to occupy the FEBA, composition and mission of the reserve, the priority of fires, and any nuclear fires to be employed to complement the scheme of maneuver.

(6) After announcing his decision, the commander may desire to elaborate on his decision to provide the staff with his concept of how he visualizes the selected course of action will be conducted. This commander's concept will provide the staff with additional guidance to assist them in preparing the necessary plans and orders. His concept may include explanation or clarification of:

(*a*) Location and composition of the COP forces.

(*b*) Tentative allocation of barrages.

(*c*) Allocation and use of nuclear weapons.

(*d*) Location and employment of the reserve.

(*e*) Provisions for rear area security.

(*f*) Guidance for the employment of specific units.

(*g*) Guidance for counterattack planning.

(*h*) Guidance for air defense planning.

*c.* An evaluation of the terrain to be defended in conjunction with forces available forms the basis for organization of the defense. The terrain is viewed from the standpoint of the enemy and his known capabilities. Avenues of approach into the position are determined and analyzed in relation to probable enemy use. Natural obstacles are identified as to their effectiveness. Observation, key terrain, fields of fire, and relative defensibility of areas are evaluated in relation to advantages and disadvantages imposed. The terrain is tentatively divided by the commander, and the strengths and weaknesses of each portion are examined to determine the relative tasks imposed on forces that will undertake its defense. The commander then visualizes the forces essential to accomplish the mission in relation to the terrain to be defended.

*d.* Once the terrain is evaluated in relation to forces required to accomplish the mission, the commander considers his resources. The defensive capability of forces are associated with portions of terrain so weaknesses are reinforced by terrain conditions and strengths are assessed in relation to less defensible terrain. Terrain is then allocated to subordinate defending forces in relation to their capabilities, with due consideration for equal defensive tasks.

*e.* In analyzing the area to be defended, consideration is given to improving the natural defensive strength of the terrain to the maximum extent possible, consistent with plans for subsequent operations. Natural obstacles may be extended or improved with mines and other artificial obstacles. Natural cover, concealment, observation, and fields of fire are evaluated with a view toward their improvement.

*f.* During analysis of the terrain, consideration is given to likely target areas for interdiction by fires. These target areas will normally be defiles on expected routes of movement of an attacker, assembly areas for massing of attacking elements, and other sensitive locations that appear essential to an attacking force.

*g.* Planning should include provisions for employment of maneuver forces forward of the defensive position in a spoiling attack and to disrupt or destroy operations in the enemy rear areas. In conduct of the defense, the defender seeks to reduce the effectiveness of the enemy's strength while making maximum use of his own combat power.

## 101. Organization for Combat

*a.* Forces are formed in appropriate task force to execute the

tasks visualized by the commander. Total available combat forces are applied against the deduced or directed requirements for establishing security, garrisoning the forward defensive positions, providing a reserve, and discharging other contingency missions.

*b.* In distributing forces to execute the brigade mission, the commander must give full consideration to flexibility in organization, contingencies, essential forces to execute contributory missions, and adequate security. If the defense is to be mobile in nature or if enemy action in overcoming the defense cannot be reasonably predicted, priority attention is given the reserve. If the mission is oriented to retention of terrain, strong elements are assigned for garrisoning the forward defense areas. If time for preparation of defensive positions is critical and the security elements are expected to extend this time, strong security forces are provided. In providing security forces, the mission and time available are weighed to determine whether these forces will come from the forward defense echelon or from the reserve.

## 102. Control

*a.* The brigade commander defines sectors of defensive responsibility for subordinate elements by designation of flank and, occasionally, rear boundaries. Flank boundaries extend forward to the limit of ground observation and to the rear to provide subordinate units adequate maneuver space for placement of forces. In the event it is intended that forward elements provide the brigade security echelon, the flank boundaries are extended forward through the security echelon position and to the maximum limits of ground observation. Rear boundaries are used for control of the area responsibility.

*b.* Normally, the brigade commander prescribes assembly areas or blocking positions for the reserve or its elements.

## 103. Fire Support

Fire support is provided the brigade by attached or supporting elements, or it is requested on a specific mission basis. Fire support planning is conducted concurrently with the development of the scheme of maneuver for defense and continues throughout the operation. This planning provides for long-range fires delivered on attacking forces as soon as they come within range, fires in support of the security echelon, fires to disrupt enemy formations engaged in attacking the defensive position, fires within the battle area, and fires in support of the planned counterattacks. Fire support plans, when formalized, become a part of the commander's defensive order.

*a.* The brigade fire support plan includes plans for all supporting fires of attached and supporting elements. Fire support plans of maneuver battalions attached to the brigade are integrated into the brigade fire support plan. Fires are coordinated with elements on the flanks, and the plan includes provisions for coordination of fires of subordinate elements.

*b.* While the brigade commander does not ordinarily direct employment of fire delivery means organic to subordinate elements, he has the prerogative of doing so. He may direct that such elements deliver fires on specific areas to support the defensive plan.

*c.* Fire support planning includes the number and yields of nuclear rounds intended for use in selected areas forward of the FEBA, on targets of opportunity, and those to be retained in reserve to support counterattacks. Specific attention is given to planning nuclear fires since delivery means may or may not be under control of brigade.

*d.* Consideration is given to fires deliverable by external agencies for special purposes. Under certain circumstances, the brigade commander requests such support in conjunction with developing his defense. As an example, armed helicopters may deliver fire support in areas not accessible to other fires. Close air support may be desirable when targets are beyond the range or capabilities of other fire support means, and naval gunfire (if available) can furnish a considerable volume of fires in certain areas.

*e.* Toxic chemical agents for persistent effect are particularly suitable means of fire support in defensive operations.

## 104. Combat Support

*a. Engineer.* An engineer company is normally placed in support of the brigade. In addition, other engineer elements will be employed in the brigade area to support the brigade and perform engineer tasks for the division. Supporting engineers will usually be employed to assist in organizing the position and increase the defensive capability of the brigade.

*b. Communication.* To control the defense, the commander must plan and insure adequate communication. All means of communication are used to the extent practicable.

(1) In the area defense, wire is a principal means of communication. When adequate wire communication is available, radio is not used; however, radio nets remain open since wire communication may be interrupted or

may be inadequate for the situation. Use of radio is normally restricted except during periods of enemy contact. Pyrotechnics and other visual signals may be used in the defense for identification of friendly units, to call for lifting and shifting supporting fire, and in the execution of counterattack plans.

(2) Contingent upon the time factor, wire communication may be provided the brigade COP. In the event it is, plans must include provisions for a positive breach in this system upon withdrawal of the COP.

(3) In a mobile defensive situation, primary reliance is placed on radio communication.

*c. Army Aviation.* Limited Army aviation support is afforded the brigade by the organic aviation section. Other aircraft are requested from division. Aircraft under control or in support of the brigade operate under direct staff supervision of the brigade aviation officer. Army aircraft are initially employed for reconnaissance, limited aerial photography, and movement of reconnaissance parties. Subsequently, they are employed for command and control, evacuation, shifting or positioning of reserves, or resupply.

*d. Chemical.*

(1) Detailed plans are prepared to insure that the use of chemical agents is closely integrated with other fire plans, barrier plans, and the scheme of defense.

(2) Toxic chemicals may be used in support of forces along the FEBA, on enemy forces concentrating for an attack, and to support the reserve in the execution of counterattacks. Chemical concentrations can be used effectively to assist in destroying, canalizing, or containing the enemy along major avenues of approach or to contaminate key terrain or likely enemy assembly areas. When toxic chemicals are authorized, it is normal to integrate chemical mines into high explosive minefields to increase their obstacle value and to make clearance more difficult.

(3) Smoke can be used to obscure operations from the enemy by blinding enemy observation posts and by hindering enemy aerial observation and tactical air operations within the defense area. Smoke must be used with caution, however, so as not to block essential observation by the defending forces.

(4) Since the brigade has no organic chemical units, large-scale use of toxic chemical agents by the enemy may require additional decontamination support from higher headquarters.

(5) For more detailed discussion on chemical support see FM 3–5, FM 3–10 and FM 101–40.

## 105. Combat Service Support

Planning for defensive operations includes consideration of available material resources and the capability for replacement of material expenditures. Similarly, combat service support agencies must be capable of, and sufficiently flexible to sustain, the operation through the anticipated period of defense and subsequent operations.

*a.* The brigade headquarters is limited to coordination, control, and planning in relation to combat service support. The brigade coordinates allocation of materiel on a priority established by the defensive plan. Items in short supply are subject to controlled distribution, and adjustments are made to insure that essential requirements are satisfied.

*b.* Service support elements are positioned to preclude their interference with maneuver. In highly fluid operations, combat service support is positioned well to the rear, but those items that are exposed to a rate of expenditure exceeding the time and space factors for routine resupply are placed in a mobile status for immediate responsiveness to meet requirements. The basic consideration in locating the brigade trains is the support of the maneuver elements.

## 106. Counterattack Planning

*a.* The counterattack is a decisive element of the defense. In the area defense, planning is conducted as soon as the general defensive scheme of maneuver is reasonably firm and is continued throughout the conduct of the defense. Priority for planning is directed toward eliminating those enemy penetrations which would most seriously threaten the integrity of the brigade sector. Plans are continued for other penetrations and are prepared in order of their threat to the battle area in the light of enemy capabilities. In the mobile defense, the defender (in selecting the battle area) seeks to force the enemy to react in conformity with the defensive plan based on planned maneuver and fires, and obtains the initiative in exploiting enemy weaknesses and errors by seizing every opportunity to destroy enemy forces by offensive action. The commander conducting the mobile defense considers counterattack and defensive planning concurrently with emphasis on planned maneuver. In the case of multiple penetrations, the initial priority for counterattack planning must include destruction of the penetration that would most endanger the

defense. Normally, the brigade commander designates likely penetrations, their priority for destruction, and all aspects that he desires integrated into the plan. The commander of the force expected to conduct the counterattack normally performs the detailed planning and submits his recommended plan to the brigade commander for approval.

*b.* The brigade counterattack plan will include an assumed penetration, the counterattacking force, fire support, and certain specific control measures that direct and control the attack (fig. 13). The width and depth of the assumed penetration is based on a consideration of the terrain the brigade can lose and still counterattack, and the capability of both the enemy and the brigade's own force. An organization for combat is developed that relates to the probable task to be accomplished. This will include appropriate provisions for a blocking force and its control, provisions for a maneuver force and subordinate tasks, and provisions for fire support either integrated into the maneuver force or available on a supporting basis. Time permitting, counterattack plans are rehearsed.

## Section V. CONDUCT OF THE DEFENSE

### 107. General

*a.* Active conduct of the defense is initiated when security elements from a higher echelon pass through the brigade COP, or forward positions if a COP is not employed. At that time, the COP initiates those actions previously planned but which have been suspended while other security forces were to their front. The tempo of aerial and ground reconnaissance is increased, and fire support registration is completed.

*b.* When the COP is withdrawn, forces occupying positions on the FEBA prepare to repel the attacker. Lanes through barriers and obstacles for passage of security forces are closed, final registration of weapons is completed, local security is made aware of the situation, and surveillance means are employed to maintain a constant fix on the attacker. If enemy forces withdraw, reconnaissance is employed forward of the FEBA to locate and determine the enemy situations and, if appropriate, the COP may again be established. If the attacker cannot be located within the brigade area of responsibility, the brigade commander should be prepared to make appropriate recommendations for a reconnaissance in force beyond his area of responsibility to locate enemy forces. He does not initiate such action without approval of higher headquarters.

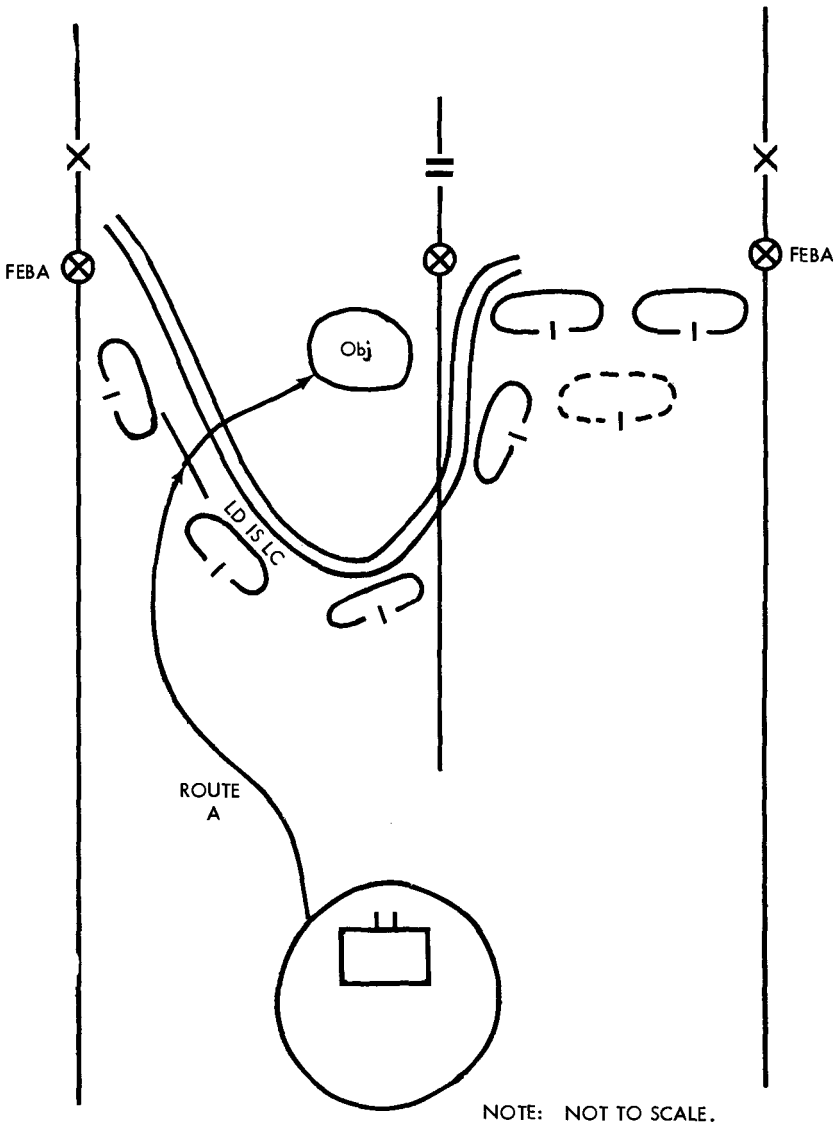



*Figure 13. Essential control elements of a brigade counterattack plan.*

(1) If the brigade or a portion of it is expected to delay or withdraw to subsequent positions in the mobile defense, the operation is executed at a predesignated time, when the enemy reaches a certain point, or when ordered to do so due to enemy action in another area. The delay or

withdrawal is executed in a manner to cause the attacker to mass and present a remunerative target for the defender's fires. In these situations, the defender must insure that maximum destruction is inflicted upon the enemy. If the enemy fails to follow up a withdrawal and the mission is not affected by the action, it may be desirable for the forward forces to initiate reestablishment of the forward position.

(2) If the brigade is participating in an area defense, forward positions are only vacated on approval of higher headquarters. Under all conditions, plans for a withdrawal are made.

(3) In the event the brigade position is penetrated, the brigade commander insures that positive controls are established for those forces within and around the penetrated area. In the event a major force on the FEBA is divided and the parent unit cannot establish efficient control, the fragmented portion or portions are frequently attached to adjacent units. Forces remaining within the penetrated area are normally attached to the counterattacking force at the time the counterattack is launched. At brigade level, blocking forces are only placed under control of the counterattacking force commander under unusual circumstances. Preferably, blocking forces are retained directly under control of the brigade to insure maximum coordination when the counterattack is launched.

(4) Maximum effort is expended in order to hold the shoulders of the penetration. Failure to do this will provide the enemy with an advance on the general front. This will not allow the counterattacking forces to block the penetration or with a counterattack, to neutralize it.

*c.* In the defense, the decision to counterattack and its timing are based upon the commander's professional judgment or (on occasion) on orders from higher headquarters. When a penetration appears imminent or has actually started, the brigade commander advises higher headquarters, alerts the counterattacking force, increases surveillance over the threatened area, and provides all available assistance to the subordinate commanders concerned.

(1) In the mobile defense, it is desirable to stop or slow the penetration; however, these conditions are not prerequisites. The counterattack should be launched prior to the time the attacking enemy can consolidate his gains and reorganize or regroup his forces.

(2) In the area defense, the brigade commander counterattacks when the enemy has seized or threatens to seize terrain critical to the defense.

(3) The attack may be launched when the enemy presents his flanks or rear, when he becomes overextended, or when his momentum is dissipated.

(4) In the event the FEBA has been penetrated at multiple locations, the brigade commander selects those penetrations which most jeopardize his mission, and he establishes priorities for their reduction. He does not fragment his reserve for reduction of all penetrations concurrently.

*d.* After commitment of the reserve, the brigade commander must reconstitute another reserve from all resources available to him. He will frequently impose conditions on the commitment of reserves under the control of subordinate elements whose positions are intact.

*e.* When a preponderance of evidence indicates a counterattack would fail, the brigade commander so advises higher headquarters and assumes a blocking role pending subsequent instructions from higher headquarters.

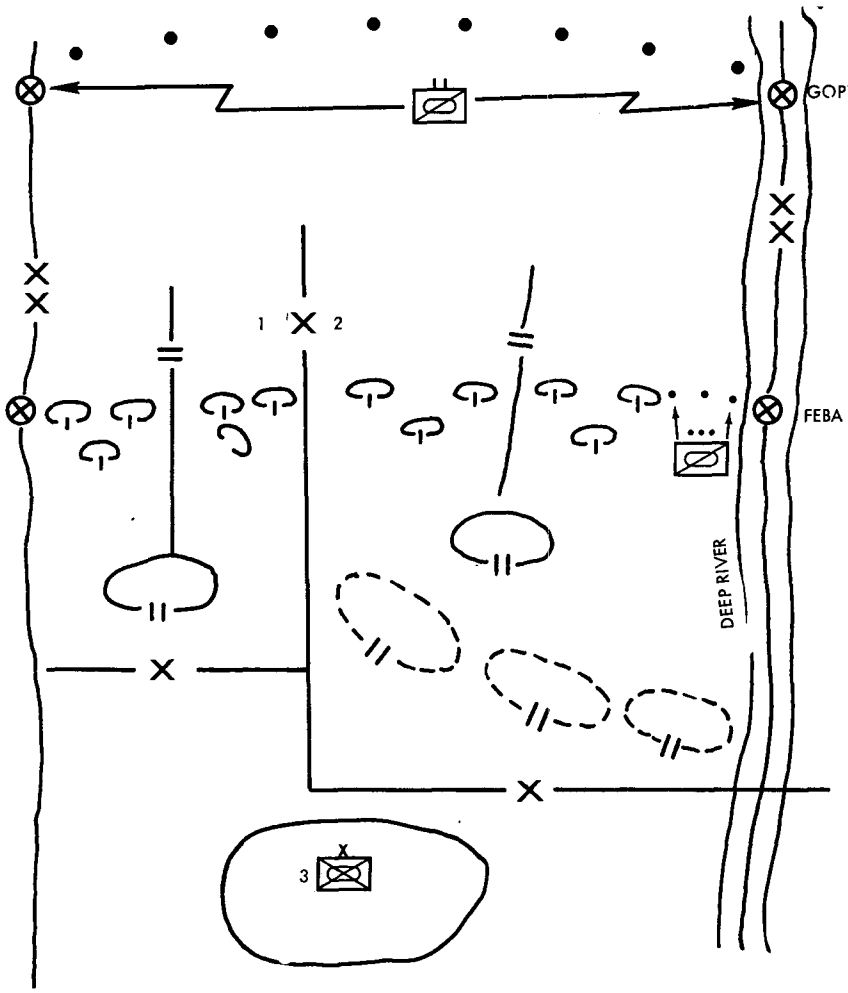
*f.* Throughout the conduct of the defense, the commander considers conducting a spoiling attack. Its purpose may be to destroy a portion of the enemy force, throw the enemy off balance, or deny the enemy ground observation and surveillance of the defended area. The successful execution of a spoiling attack requires a high degree of mobility and firepower.

## 108. Brigade Participation in a Mobile Defense

The brigade rarely conducts a mobile defense because of the need for a strong reserve capable of destroying substantial enemy forces; therefore, the brigade normally participates in the mobile defense as a security force, fixing force, or reserve (fig. 14). This type defense is an active, aggressive defense where units conduct delay, defense, and offense to accomplish the mission. Because of the fluid aspects of the mobile defense, the situation may change rapidly. The brigade commander must be prepared for all eventualities. The type mission assigned dictates the mobility and width of the sector given to the brigade.

## 109. Security Forces in Mobile Defense

Security forces employed by the brigade in the mobile defense consist of the combat outpost, observation posts, listening posts,




NOTE: Not to scale.

a. 1st Brigade is conducting area defense while participating in mobile defense being conducted by division.

b. 2d Brigade is prepared to delay to blocking positions on order in support of the mobile defense being conducted by division.

c. 3d Brigade constitutes division reserve prepared to counter-attack on order.

*Figure 14. Brigade in mobile defense.*

patrols, and rear area security. The considerations discussed below are also applicable to the brigade acting as a division or corps security echelon in the area defense.

*a.* The brigade commander is allocated appropriate forces to execute his security mission. Desirably, these forces should be

at least as mobile as the enemy they are expected to oppose. Mechanized infantry and tank battalions, self-propelled artillery, and elements of the armored cavalry squadron are highly effective in executing this type mission.

*b.* Because of the nature of a security mission, the proportion of reconnaissance elements to other forces is increased. In the event constituted reconnaissance units are not provided, the force commander should form them from available resources. Airmobile forces are suitable for this purpose; however, if aircraft are not available in appropriate quantities, highly mobile ground forces of combined-arms teams are employed.

*c.* Security elements operate in a semi-independent role at a considerable distance from the main force. For this reason, attachment of combat support units is preferred over a supporting relationship. The brigade commander will normally further attach his resources to form combined-arms teams capable of operating along selected avenues of approach into his area of operation.

*d.* The brigade commander conducting a security mission will normally establish and organize his operation in a manner similar to a defense. His security echelon is normally constituted of reconnaissance elements. Forward forces man the line of designated security positions, and an appropriate reserve is retained consistent with the nature of his mission.

*e.* The execution of a security mission is similar to that of a delaying action in that the commander is expected to trade space for time. His planning includes appropriate considerations for a delaying action as outlined in chapter 6.

*f.* A rear area security force is normally not established by the division unless the threat warrants it. If assigned a rear area security mission, the brigade conducts reconnaissance, maintains surveillance over critical areas and establishes observation posts, roadblocks, and patrols.

## 110. Special Considerations

The nature of the type operation being conducted and the area of operations dictate the manner in which the mission is discharged. An expedient method that will enhance execution of the mission should be adopted immediately. Certain special considerations are appropriate.

*a.* An attacking enemy may cause the security force to abandon its position and then fail to follow up or continue the attack. If this occurs, the reconnaissance elements of the security force having maintained contact with the enemy move forward of the delay-

ing position again when feasible. The security then reoccupies the abandoned position, forcing the enemy to again mass to overcome the position. Such actions must be within the authority of the commander conducting or approving the operation.

*b.* Unless so ordered, positions will not be abandoned until the enemy clearly demonstrates strength capable of overcoming the garrisoning element.

*c.* Covering or general outpost forces are ideally suited for the employment of stay-behind forces. Placement of these forces in conjunction with a security mission precludes a requirement for penetration of the enemy areas at a later time and reduces casualties resulting from these actions.

## 111. Fixing Forces

*a.* The mission of the fixing forces in a mobile defense is to warn of impending attack; delay, disorganize, and inflect maximum destruction upon the enemy; force the enemy to mass by either or both offensive and defensive action; and canalize him into a suitable area for attack by the division reserve.

*b.* The fixing forces may conduct area defense, delaying actions, screening force operations, and limited offensive operations in any combination as required in order to contain and/or canalize the attacker and make him as vulnerable as possible to the counterattack of the reserve.

*c.* The wide sector normal to the mobile defense, coupled with the requirement to retain the bulk of the division in reserve, limits the combat power that will be allocated to the fixing force. Seldom will the brigade have sufficient force to establish a COP. Wide intervals between battalion strongpoints will be common, placing greater requirements on surveillance means.

*d.* The size and composition of the brigade reserve must be based on consideration of the requirement for each strongpoint, the counterattack routes available, the mobility of the force, and the length of time the area is to be defended. While the reserve will counterattack when specific terrain to be retained is threatened, they will be committed less often to restore the FEBA than in the area defense.

## 112. Reserve

The brigade assigned the division reserve mission in the mobile defense is tailored for offensive action. It is the strongest element of the division and is given priority in allocation of forces. It includes the bulk of the division's tank strength. (For additional discussion of the reserve brigade see paragraph 116).

## 113. Brigade Participation in an Area Defense

The area defense is based on retention of specific key terrain. Emphasis is placed on blocking avenues of approach into the battle position and defending in depth to hold the terrain. The bulk of the division's combat power is committed to defending the forward defense area. The brigade may participate in this type defense as part of the division or it may conduct an area defense within its assigned mission as a fixing force in the mobile defense.

## 114. Security Forces in Area Defense

*a.* Considerations for employing the brigade as a security force in the area defense are similar to those in the mobile defense (para 109). With the bulk of the division allocated in the forward defense area, the GOP is manned normally by the armored cavalry squadron. The reserve brigade, although primarily concerned with preparing blocking positions and counterattack plans, may be assigned missions in the division security echelon and provide elements for rear area security missions.

*b.* In addition to the formal security echelon employed by division, the brigade in the forward defense area will provide a COP.

## 115. Forces in the Forward Defense Area

The brigades in the forward defense area are infantry-heavy. The brigade organizes its assigned position with the bulk of its force on the FEBA. Battalion defense areas are disposed laterally and in depth to provide mutual support and all-round defense. Emphasis is placed on retaining key terrain and repelling the enemy's attack by fire and close combat.

## 116. Brigade as Division Reserve in Area Defense

The reserve is positioned so that it can execute counterattack plans and contain penetrations from the front or flanks. The reserve insures the continuity of the defense by counterattacking enemy penetrations, by executing blocking missions, or by reinforcing forward elements.

*a.* The reserve brigade is assigned the primary mission of preparation and execution of counterattack plans. Counterattack planning is conducted concurrently with development of the defense plan and is continued throughout the defensive operation. Adjustment in the defensive situation will frequently require a

change in the counterattack plans. Once plans are prepared and approved, subordinate commanders are briefed and required to rehearse their plans with their immediate subordinates.

*b.* The development of blocking positions and the general provision for depth to the battle area is normally assigned to the reserve brigade. These positions are prepared in accordance with the division plan of defense, but not necessarily limited to it. In development of depth to the division battle position, the reserve brigade commander should make appropriate recommendations for adjustments or additional positions.

*c.* The reserve brigade or a portion of it may be directed to relieve a brigade occupying a forward defensive position or to replace an element that has been destroyed. The reserve brigade commander and staff will remain continuously abreast of the situation to permit expeditious action in these cases.

*d.* The reserve brigade may be called upon to conduct reconnaissance in force forward of the battle area.

*e.* Under certain circumstances, maneuver elements that will be available to the brigade for a counterattack may be employed on a mission directly under control of division with arrangements for their immediate availability to, and constant liaison with, the brigade commander.

*f.* When aircraft are allocated to the reserve brigade to assist in rapid deployment of security forces, the brigade prepares plans for employment of its airmobile forces as part of the division rear area security plan.

## Section VI. OTHER DEFENSIVE OPERATIONS

### 117. General

In addition to the threat of an attacker attempting to overcome defending forces on the FEBA and penetrations into the areas of adjacent forces that threaten the brigade position, the commander must be alert to the probability of an armor penetration, air-delivered forces, guerrilla elements in the rear areas, and infiltration through gaps in the defensive positions. In many cases, these operations may be minor in nature, but may be (and frequently are) geared to disrupt operations in the rear area during a critical period. Initiail planning should include provisions for early detection of these threats and their destruction when they materialize. Highly mobile forces with a self-sustaining combat capability are particularly effective for this type defense.

*a.* Initial planning should include provisions for establishment of an observation and patrol capability in rear areas. The responsibility for establishment of this system may be given to the reserve commander along with adequate authority to call upon brigade forces, to assist in implementing his plan. Initial provisions should include local security for all elements in the rear area, an effective communication system, armed convoy escorts, a barrier plan, and the establishment of observation posts. All organic, attached, supporting, and other units in the area are integrated into the planning.

*b.* Observation posts are established throughout the brigade area of responsibility. Establishment of the system should be in conjunction with similar plans of adjacent elements and the division system to the rear. These facilities should have communication links to similar elements and the control headquarters. Aerial surveillance and observation should be employed whenever feasible.

*c.* Patrols should be employed in defense situations to maintain contact and to develop intelligence. Reconnaissance patrols are employed into those areas that cannot be effectively screened by observation and during periods of reduced visibility. Once a threat is located, it is reported, maintained under surveillance, and its actions continuously referred to the controlling headquarters. Under no circumstances should an area be neglected because of its isolation or because it is considered impassable. Consideration should be given to airmobile patrols.

## 118. Defense Against Airborne Attack

Defense against airborne attack includes use of observation posts, patrols and a readily available reserve.

*a.* At such time as the enemy airborne operational area is located, it is taken under fire (by available fire delivery means) to effect maximum disruption of the operation, inflict casualties, and prevent reorganization. If the enemy force is of sufficient size, consideration should be given to employment of a nuclear weapon in the area.

*b.* A mobile force to destroy or contain the enemy threat should be made available from the brigade reserve. It should include resources to independently sustain itself for the period of time required to eliminate the airborne force. Desirably, it should contain armor and mechanized infantry. If the mechanized element can initiate an attack prior to the enemy's reorganization and preparation for defense, the problem of destruction is minimized.

## 119. Defense Against Air Attack

*a.* Air defense units may operate in the brigade area under the control of division or higher headquarters. The fires of organic individual and crew-served weapons of the attached battalions may be employed in coordination with air defense weapons to reduce enemy air activity in the brigade area. Detailed plans for use of air defense artillery are prepared by the commander of the air defense unit in coordination with the FSCOORD.

*b.* Air defense measures taken by brigade elements may include passive protective measures, a warning system, assignment of firing areas, and attack of air targets in accordance with established rules of engagement.

*c.* Caliber .50 machineguns can provide brigade units with a limited local air defense capability against hostile, low-flying aircraft. These weapons are employed as part of the unit's local defense with a dual mission of ground and air defense. The machineguns are not components of an integrated and coordinated air defense system. Normally, the following rules for engagement apply:

(1) Attack aircraft committing a hostile act (FM 44–1).
(2) Attack aircraft identified as hostile.

## 120. Defense Against Guerrilla Attack

*a.* To preclude the probability of guerrilla interference with brigade rear area operations, the area may be cleared of all civilian elements, and roadblocks established to prevent reentry. Civilian supplies should be placed under guard or evacuated with the indigenous personnel.

*b.* In areas where a guerrilla threat exists, effective local security for all installations is essential. Small installations should be grouped to insure adequate strength for defense against an attack until such time as reinforcing elements can arrive. Unless they possess a local preponderance of strength or are capable of achieving surprise (such as by ambush), guerrilla forces are unlikely to attack an organized military force.

*c.* Aerial observation should be established as a means of detecting infiltration. The extent and techniques used will vary; however, in some instances, continued aerial surveillance will be necessary.

*d.* All supplies, except medical, should be destroyed if they must be abandoned on position. Supply vehicles should move in convoys.

*e.* For details on defense against guerrilla attack see FM 31–16.

## 121. Defense Against Infiltration Forces

Infiltration becomes a particular problem when forward forces adopt a dispersed formation. To prevent large-scale infiltration, gaps between positions should be covered by surveillance, patrols, and fires, and dominated by the positioning of reserve elements and antipersonnel obstacles. An effective control of gaps will prevent infiltration of large forces. In the event infiltration on a large scale cannot otherwise be prevented, mobile forces should be organized to cope with the problem. Small-scale infiltration may be offset by defensive measures similar to those prescribed for defense against guerrilla forces.

## 122. Contingency Planning

Commanders must give attention to the possibility of a failure on the part of defending forces or unexpected combat power on the part of the enemy. Plans must be sufficiently flexible to insure timely reaction to offset the unexpected and to preserve forces in the event the commander is unable to offset a threat to accomplishment of the mission. Until authorized to do so, a defensive position may not be abandoned. Contingency planning must include consideration for these factors and include sufficient flexibility to successfully encounter unexpected situations.

# Section VII. REAR AREA SECURITY AND AREA DAMAGE CONTROL

## 123. General

*a.* Rear area security measures are actions taken to prevent or neutralize enemy threats to units, activities, and installations in the rear area, except active air defense operations or actions against enemy threats large enough to endanger the command. A large scale enemy penetration or vertical envelopment of the rear becomes a part of the main battle and, thus, becomes an operational matter.

*b.* Area damage control consists of the preventive and control measures taken prior to, during, and after an enemy nuclear, chemical or biological attack or natural disaster to minimize the effect on combat service support.

*c.* The brigade S4 is responsible for the implementation of rear area security measures in the brigade trains area. Planning for, and implementation of, rear area security measures for the remainder of the unit's rear or reserve area is an operational func-

tion of the S3. Area damage control, on the other hand, because it is the action taken to minimize damage in the rear area, is solely the staff responsibility of the S4.

## 124. Rear Area Security

*a.* The brigade S4 discharges his responsibility for rear area security by—

(1) Locating logistical facilities where they can provide mutual support.
(2) Establishing a security plan for the trains area.
(3) Enforcing camouflage and light discipline.
(4) Employing obstacles.
(5) Using armed convoys.
(6) Coordinating the security plan with reserve elements located in proximity to the brigade trains.

*b.* When the threat of guerrilla and infiltration action is of a magnitude that renders the security capability of logistical support units ineffective, combat units may be assigned specific security missions to insure continuation of logistical support operations.

## 125. Area Damage Control

*a.* Actions taken by the brigade to avoid or minimize the effects of enemy mass destruction attacks or natural disasters include:

(1) Dispersion of combat service support units consistent with the accomplishment of the mission.
(2) Locating logistical facilities to capitalize on the protective characteristics of the terrain, such as caves and tunnels, and subsurface manmade structures. (This measure has more application at division and higher levels because of the relative stability of logistical facilities at these levels as compared to the frequent displacement of trains at the battalion and brigade level.)
(3) Establishing an adequate warning or alert system.
(4) Locating logistical facilities to take advantage of natural concealment and enforcing light and camouflage discipline.
(5) Establishing unit area damage control standing operating procedures.
(6) Designating unit area damage control teams (if not included in the SOP).
(7) Training area damage control teams to include integration with tactical training.

*b.* Active measures taken to restore control include:

(1) Dispatching an area damage control team(s) to the site of the attack or disaster.

(2) Damage assessment of both personnel and materiel.

(3) Providing medical evacuation for personnel of the affected unit(s).

(4) Performing radiological monitoring and survey when mass destruction is the result of a nuclear weapon.

(5) Restoration of control to include communications in the affected unit or, if appropriate, assumption of control by the area damage control team.

*c.* A control and assessment team is formed at brigade level from the resources in the brigade headquarters and headquarters company, its composition and functions include:

(1) Establishes control and assessment command post.

(2) Determines and reports effectiveness of units.

(3) Assumes control of units in affected area.

(4) Releases combat effective units to tactical commanders.

(5) Requests required combat service support.

(6) Directs and controls the operation of rescue and decontamination squads.

*d.* The brigade usually does not form light rescue and decontamination squads because it has no organic units other than the headquarters and headquarters company. The brigade S4 does, however, direct the rescue and decontamination squads of one battalion to assist another when the magnitude of destruction is beyond the scope of such teams in the affected battalion.

# CHAPTER 6
# RETROGRADE

## Section I. GENERAL

### 126. Introduction

A retrograde operation is any movement to the rear or away from the enemy. It may be forced by enemy action or it may be voluntary as part of an overall scheme of maneuver. It should be planned in advance. Retrograde operations are characterized by centralized planning and decentralized execution. A retrograde operation, because of its effect on morale, requires positive and effective leadership and initiative in small-unit and task-force leaders.

*a.* The philosophy of all retrograde operations is to inflict as much damage on enemy forces as the situation permits. Therefore, retrograde operations are conducted as a series of defensive, offensive, withdrawal and delaying operations. Every occasion offered to inflict damage on enemy forces is exploited to the maximum. When he masses, he is attacked by fires. Enemy forces that advance too quickly and extend themselves are attacked and destroyed by maneuver elements.

*b.* Retrograde actions are operations of movement. Withdrawing forces should, therefore, possess mobility superior to (or at least equal to) that of the enemy. If mobility resources are not adequate for the entire force, the portion having mobility superior or equal to that of the enemy is used to hold and harass the enemy. Elements can withdraw from an enemy possessing a greater means of mobility by employing such measures as covering forces; using nuclear and/or nonnuclear fires; maintaining control of the available routes; reinforcing available obstacles; and providing deception. These measures offset the enemy's advantage in mobility.

### 127. Purposes and Types of Retrograde Operations

*a. Purposes.* The inherent purpose of a force in a retrograde operation is to preserve the integrity of the force so that at some

future time the offense may be resumed. Additionally, retrograde movements are conducted for one or more of the following reasons:

(1) To harass, exhaust, resist, delay, and inflict punishment on the enemy.
(2) To draw the enemy into an unfavorable situation.
(3) To permit the use of elements of the force elsewhere.
(4) To avoid combat under undesirable conditions.
(5) To gain time without fighting a decisive engagement.
(6) To disengage from combat.
(7) To place the forces involved in the desired position in relation to other friendly forces.
(8) To shorten lines of communication.

*b. Types.* Retrograde operations are classified by types as withdrawal, delay or retirement.

## 128. Fundamentals and General Considerations

*a. Proper Use of Terrain.* Terrain has a definite influence on all retrograde operations. Good observation and fields of fire are desirable so the enemy can be engaged at long ranges. Natural and manmade obstacles including barrier systems, minefields, and demolitions (in combination with the effective use of CBR and atomic demolition munitions) are exploited to materially enhance delay, protect exposed flanks, and impede enemy movement. Concealment and cover are sought when selecting assembly areas and routes of movement. Road nets are exploited, especially by armor and motorized forces, to expedite movement and to facilitate control of the operation. Road nets are denied to the enemy.

*b. Maintain Freedom of Action.* Close combat is avoided unless required to accomplish the mission. Freedom of maneuver is essential to rapidly exploit any situation unfavorable to the enemy, to shift forces to meet enemy attacks, to secure the flanks and rear, and to take maximum advantage of terrain. A decisive engagement is avoided except at the option of the withdrawing force.

*c. Detailed Centralized Planning—Decentralized Execution.* Retrograde operations are characterized by detailed centralized planning and decentralized execution. Communication and control become increasingly difficult in retrograde operations. When communications with the parent unit are lost, subordinate unit commanders must act independently until centralized control is regained.

*d. Nuclear Weapons.* The possession of nuclear weapons by withdrawing forces effects a measure of delay in itself, for it forces

caution on the enemy by discouraging his application of mass. Nuclear weapons allow closer engagement than might otherwise be possible, since their timely employment can facilitate breaking contact by temporarily isolating enemy forward forces. Forces may delay with greater effectiveness by defending temporarily at major natural or artificial obstacles. If the enemy masses sufficient strength to force a passage, he becomes vulnerable to a nuclear attack which (when exploited by limited offensive action) inflicts greater damage on the enemy force.

*e. Passive Protection.* The nature of retrograde operations (extended frontages, infiltration tactics, movement under conditions of reduced visibility, linear formations, rapidly changing situations) provides a degree of passive protection from nuclear weapons during the operation. The probability of enemy interdiction of road nets along the routes of withdrawal demands planning for alternate routes.

*f. Routes of Withdrawal.* Control of routes of withdrawal is essential to effective retrograde operations. A retrograde operation can rarely be conducted without the civil population becoming involved in the operation. Control and evacuation of civilians must be considered in all plans for such a movement to avoid traffic disorder and congestion which might restrict the freedom of movement of the withdrawing force. Route priorities are planned for all units to insure an orderly shifting of forces with due consideration for their mission and capabilities.

*g. Priority Requirements.* An aggressive enemy is expected to follow any retrograde movement relentlessly and to strike withdrawing columns from all directions. For this reason, mobile security forces, continuous reconnaissance, rapid movements, and air and antitank defense become priority requirements.

*h. Army Aviation.* Army aircraft may be effectively used to move units engaged in a retrograde operation. Commanders can achieve better control and obtain more timely information by supervising the operation from Army aircraft. When airmobile forces are heavily engaged, armed aircraft may be utilized to assist them in disengaging and to cover their withdrawal. Aircraft observers may conduct reconnaissance to determine conditions of roads and bridges to the rear and locate bypasses and alternate routes in case bridges are destroyed. Aircraft may be used to move supplies and equipment and to evacuate wounded.

*i. Morale.* A retrograde movement is a planned operation with a positive purpose. This fact must be emphasized to the troops engaged in the operation. Rumors are suppressed to prevent dis-

organization and maintain morale. Forceful leadership, strict discipline, control, and prior planning are necessary to insure that the intent of the operation is fully recognized and executed.

*j. CBR.* In retrograde operations, flame weapons are effectively used against mass attacks which threaten to overrun positions. Persistent toxic chemical agents and prepositioned atomic demolitions (ADM) are effective for contamination of terrain after a withdrawal by friendly forces. The enemy may avoid the contaminated area and be forced into unfavorable terrain, or the enemy may cross the contaminated area and accept casualties.

## 129. Control Measures

Basic control measures for a retrograde operation may include boundaries, routes of movement, phase lines, checkpoints, traffic control posts, and a series of delaying positions.

*a.* A retirement does not visualize organized enemy opposition during its conduct. Control measures are normally limited to routes of movement, phase lines, and traffic control posts.

*b.* A delaying action will include designated delaying positions, zones of action, and routes of movement if road arteries are limited and priority for their use is required. The division may confine control measures to zones of action and phase lines with provisions for retention of positions for a specified period of time or until certain situations occur. Under these circumstances the brigade may subdivide the zone of action for control of attached maneuver units and establish delaying positions or phase lines.

*c.* Control measures prescribed for a withdrawal are based on the situations under which the withdrawal is expected to occur. When the withdrawal is conducted during periods of reduced visibility with a probability of enemy pressure, highly restrictive control measures are essential. If conducted during daylight under enemy pressure, control measures are generally limited to those prescribed for a delaying action.

*d.* Designation of control measures must include the consideration that unnecessary restrictions preclude initiative, flexibility, and improvisation on the part of subordinates. Prescribed control measures should be limited to those essential to security, direct phasing of the operation, and maintenance of integrity of the command.

## 130. Planning

Planning of a retrograde operation is centralized and as detailed as available time and resources will permit. Sequence of

planning is similar to that of a defensive operation. The commander's decision and concept for retrograde operations essentially contain the same elements as for the defense; and, in addition, should include the manner of withdrawal, security during movement and time phasing, and occupation of subsequent position(s) to the rear. In the development of refinement of plans for a retrograde operation, the essential elements must include provision for: positive and effective coordination, complete control of routes of movement, control of civilian personnel to the rear, responsiveness of all resources, and means to insure flexibility in the operation.

*a.* The nature of a retrograde operation places primary reliance on radio communication. The use of wire should be planned to compensate for possible enemy electronic countermeasures. As a minimum, planned wire systems should include trunks along routes of movement of major subordinate command and control elements and integrated systems on all delaying and covering positions. To provide for the loss of contact and insure unity of effort in this situation, the plan of operation should be made known to the lowest subordinate leaders, consistent with security. Concurrent with planning, liaison should be established with adjacent elements to insure mutual support, flank security, and provide unity of effort. In the event adjacent units do not employ forces in a manner to prevent envelopment of withdrawing forces, reserves are set aside for this purpose.

*b.* Control of routes of movement is normally exercised by division or higher level. Frequently, however, military police personnel are made available to the brigade for this purpose. Under this condition the brigade must establish a route control system. Positive measures should be taken to insure that all elements in the zone of movement respond to route control measures.

*c.* Early liaison should be established with the division civil affairs officer and the provost marshal to insure that plans for evacuation and control of civilian personnel meet the needs of the brigade plan.

*d.* To insure responsiveness to provision of the plan by all elements, appropriate arrangements are made for reconnaissance by representation from subordinate units. Elements expected to perform supporting tasks in the operation are made as self-sufficient as practicable consistent with the mission to be executed. Plans for providing support to operational elements of the command are thoroughly integrated into the overall plan.

*e.* In development of the plan for the operation, careful consideration is given to maximum flexibility. Essentially, the mission and contributing tasks are fixed. Alternate plans are developed to meet anticipated changes that may affect the principal plan, and all aspects are analyzed to insure that maximum freedom of action is given subordinate commanders under contingency situations.

### 131. Organization for Combat

Organization for combat is effected to insure maximum flexibility and full utilization of resources consistent with the type operation and the mission to be executed. In cases where control and security of supporting elements cannot be effectively established, appropriate fragmentation and attachment is effected.

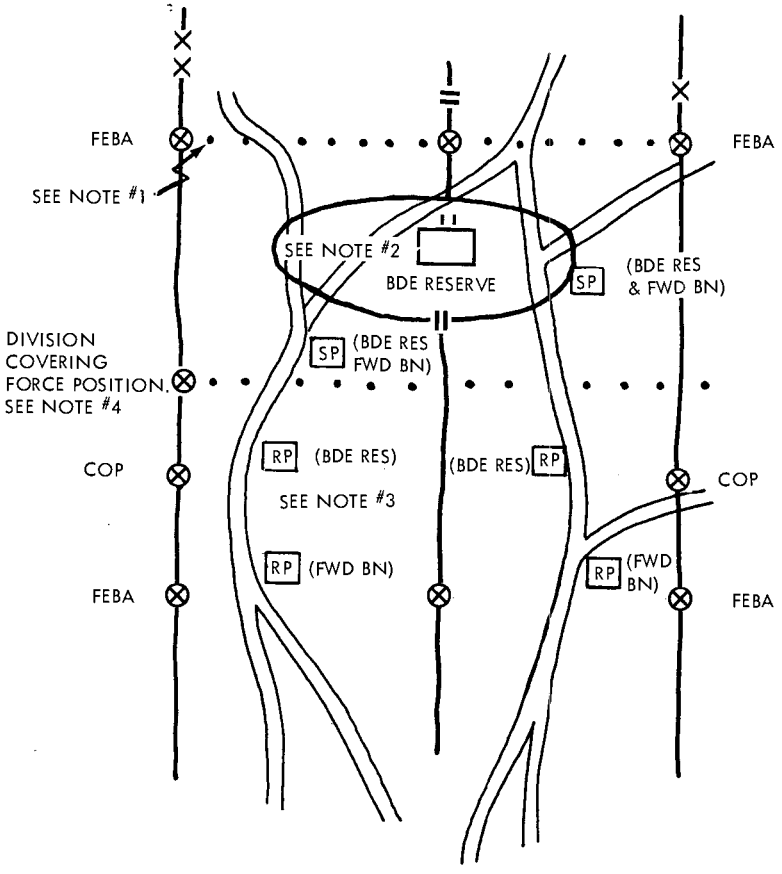
## Section II. WITHDRAWAL

### 132. General

A withdrawal is a type of operation in which all or a part of a deployed force disengages from the enemy. Contact may be general or confined to certain portions of the force. Certain elements remain in contact with the enemy to prevent his unrestricted followup of the main force and to inflict maximum damage on his formations by fires or appropriate maneuver action. In a division withdrawal, the brigade may control all or part of the withdrawing elements or provide a covering force as security for the forces engaged in the withdrawal. These operations are typed as night or voluntary and daylight or involuntary, and techniques of execution are based on the type to be employed (figs. 15 and 16).

*a.* Essentially, a voluntary withdrawal is planned and based on secrecy and deception, and an involuntary withdrawal envisions the withdrawing unit fighting its way to the rear by a series of delaying actions. In view of the losses associated with an involuntary withdrawal, it is avoided whenever possible in favor of a voluntary withdrawal.

*b.* Normally, the time and conditions for a withdrawal are prescribed in directives from a higher command. When the decision for the type withdrawal rests with the brigade commander, he is guided by weighing losses expected from involuntary withdrawal against those he will accrue in delaying the withdrawal until conditions favoring a voluntary withdrawal develop. In arriving at such a decision and in the conduct of a directed involuntary withdrawal, best use should be made of smoke and all other resources to create deception.



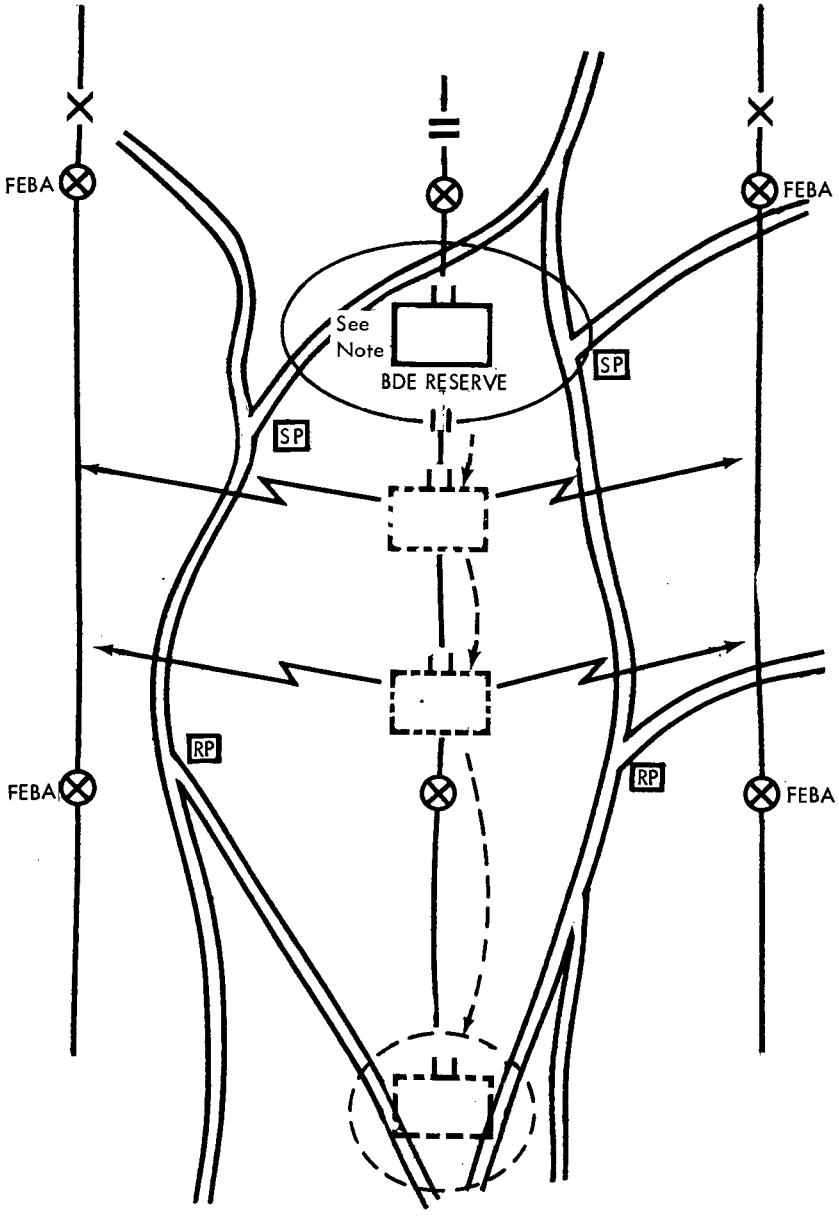

NOTES:

1. DETACHMENTS LEFT IN CONTACT FROM FORWARD BATTALIONS.
2. BRIGADE RESERVE MAY BE WITHDRAWN PRIOR TO, AT THE SAME TIME OR AFTER THE FORWARD BATTALIONS.
3. BRIGADE RESERVE WOULD BE GIVEN RELEASE POINTS AS SHOWN IF THEY WERE TO OCCUPY THE COP.
4. DIVISION IS PROVIDING A COVERING FORCE.
5. SKETCH NOT TO SCALE.

*Figure 15. General scheme, brigade voluntary withdrawal.*

## 133. Planning

Planning for a withdrawal involves close attention to detail, thorough briefing, and reconnaissance by all subordinate elements. Consistent with security requirements, commanders




NOTE: Brigade reserve acts as covering force after fwd bns have wd through their initial position.

*Figure 16. General scheme, brigade involuntary withdrawal.*

should provide for their subordinate leaders to reconnoiter the area in which they are expected to operate. Elements expected to operate on independent missions are permitted to conduct reconnaissance in any case. Planning and directives for the operation must include the following essential elements.

*a.* Time and priority of withdrawal of subordinate units.

*b.* Sectors, phase lines, routes of withdrawal, and traffic control measures to be employed.

*c.* Provision for security and covering forces and the locations of each.

*d.* Provisions to prevent compromise of the intention to withdraw.

*e.* Organization for combat and time-phasing of attachments and support.

*f.* Provisions for disposal or destruction of supplies and equipment (except medical) in a manner and at a time which will not compromise the plan of withdrawal.

*g.* Provisions for service support during the operation.

*h.* Provisions for locating, treating, and evacuating all wounded prior to the withdrawal.

*i.* Location of position to be occupied subsequent to the withdrawal and disposition of forces.

*j.* Provisions for breaking contact in an involuntary withdrawal and action to be initiated if the enemy attacks to follow up a voluntary withdrawal.

*k.* Subsequent missions.

## 134. Conduct of a Voluntary Withdrawal

The brigade commander prescribes the strength and disposition of forces to be left in contact upon withdrawal of the main force. In addition, he designates a brigade-level command element to control the operation and carry on such communication traffic as will approximate normal operations. Under certain circumstances such as anticipated enemy pressure and in absence of such action at division level, brigade will establish a covering position utilizing the brigade reserve (FM 61–100).

*a.* As soon as a concept of operation is reasonably firm, the commander issues a sufficiently detailed warning order to permit reconnaissance and planning by subordinate commanders during daylight hours.

*b.* Time of withdrawal is normally specified in the division order. If not, the brigade commander prescribes the time of withdrawal of subordinate elements. In order to provide the

maximum period of darkness for the entire operation, the operation should commence as early as darkness permits.

*c.* To insure that the withdrawal is accomplished as expeditiously as practicable, elements not immediately essential to the operation are designated for infiltration to the rear to prevent road congestion when the main force withdraws.

*d.* Withdrawal plans normally provide for the simultaneous withdrawal of all forward committed battalions. Those elements designated as detachments left in contact become, thereafter, a separate force under brigade control. In designating forces to be left in contact, every effort should be made to provide mobility superior to that of the enemy.

*e.* To insure adequate control of the operation and provide for orderly movement, elements located in the areas of major subordinate units are attached to these units prior to initiation of the withdrawal.

*f.* Withdrawal of detachments left in contact should be initiated in sufficient time to permit their withdrawal without pressure.

*g.* When division or the controlling headquarters provides a covering force, the reserve is withdrawn prior to movement of the forward elements. Under this condition, the brigade reserve starts organization and preparation of positions to be manned by the brigade after withdrawal. When a covering force is not provided from the directing headquarters and the brigade commander considers a covering force necessary, it is constituted from the brigade reserve and assumes positions securing the main elements. When the main elements have passed through the covering force, it assumes the mission of, and conducts the appropriate actions for, a brigade COP. Normally, a portion of the brigade reserve is left in position to represent the reserve communication system, simulate normal activities of a full brigade reserve, and assist withdrawal of the detachments left in contact.

*h.* At battalion and lower level, assembly areas are frequently designated to insure control of forces prior to forming a march column. The assembly area is not normally used at brigade level.

*i.* If the voluntary withdrawal is discovered, the brigade elements conduct the action as an involuntary withdrawal. Planning should provide for such a contingency, and all subordinate leaders will be made aware of the alternate plans.

## 135. Conduct of an Involuntary Withdrawal

An involuntary withdrawal is based on elements fighting their

way to the rear, using delaying tactics. Terrain permitting, this action is best accomplished by mechanized and armor elements. If a force conducting an involuntary withdrawal contains both infantry and mechanized infantry, the mechanized elements are employed in the delay action as a covering force with the infantry occupying delaying positions during enemy displacement forward. A high degree of coordination and skillful employment of obstacles and terrain is essential under these conditions. Authority for withdrawal should rest with the lowest echelon of command consistent with the requirements for a coordinated effort.

*a.* Control measures used for an involuntary withdrawal are similar to those for a voluntary withdrawal.

*b.* Since higher headquarters may or may not provide a covering force the brigade commander may elect to use his reserve as a covering force or to withdraw without providing a covering force. This decision is based on the following considerations.

(1) Availability of forces to constitute a covering force.
(2) Availability of time to deploy a covering force.
(3) Availability of suitable terrain on which to employ a covering force.
(4) Location of any covering forces provided by higher headquarters.

*c.* When simultaneous withdrawal is not practicable, the commander must determine the order of withdrawal. The decision must be based on determining which plan best preserves the integrity of the force and which best contributes to the accomplishment of the mission. Generally speaking, the least engaged units are withdrawn first.

## Section III. DELAY OPERATIONS

### 136. General

A delay is a type of operation in which a force under pressure trades space for time while inflicting maximum punishment on the enemy without becoming decisively engaged. In terrain permitting maneuver, mechanized infantry and armor elements are ideally suited for this type operation. Under normal conditions and varying terrain, a combination of mechanized infantry, infantry, and armor can conduct an effective operation.

*a.* Delay may be accomplished on either successive positions or alternate positions. Continuous delay is inherent in both types of delay.

*b.* Planning a delay is highly centralized; executing a delay is decentralized to the lowest level at which specific missions are assigned. Movement of delaying forces is coordinated to a degree essential to insure preservation of security and maintenance of command integrity. Commanders at lower echelons are frequently given authority to execute offensive maneuver against enemy forces provided such action does not endanger accomplishment of the brigade mission.

*c.* In the conduct of delay within a specified area, the brigade commander may provide for delay on alternate or successive positions. When a high degree of mobility is available, the delay may be conducted from successive positions, thus providing stronger forces to delay. Terrain not permitting, or in the absence of adequate mobility, a delay from alternate positions is conducted.

*d.* The echelons of a delaying position are similar to those used in the defense. They may consist of a security area, a forward defense area, and a brigade reserve area. When a wide zone is assigned to the brigade, a COP is not normally feasible, in which case emphasis is placed on local security.

## 137. Planning the Delay

*a.* A directive to initiate a delaying action may be broad in scope and provide that enemy forces be retained beyond a designated line for a specified period. In this case, the brigade commander establishes an initial and other delaying positions and sufficient flank boundaries to insure effective control of subordinate elements. The order for the delaying action which the brigade receives from a higher headquarters will usually specify boundaries, phase lines, the time schedule for the delay, the initial delaying position, and the line along which the delay will terminate. It may also include interim delaying positions.

*b.* The brigade commander evaluates the zone in which the delaying action is to be conducted in relation to trafficability, obstacles, key terrain, road networks and routes of withdrawal, defensibility, and the width of the area.

*c.* If the width and other characteristics of the zone on delaying positions preclude an even distribution of delay forces, the brigade commander should assign priority to the better approaches and provide for surveillance (in conjunction with mobile forces) on others. In wide zones, consideration should be given to the use of forces in conjunction with natural and artificial obstacles in developing delaying positions.

### 138. Conduct of the Delay

The brigade commander strives to establish and maintain continuous contact with the enemy. Once contact has been established, all remunerative targets presented within range of fire delivery means are subjected to fires. Thorough reconnaissance forward of delaying forces is employed as far as is consistent with the mission and security (fig. 17).

*a.* The position is retained in the same manner as in a defensive operation, but forces normally avoid decisive combat. If the delaying element is forced to give ground, the reserve of the maneuver element of which it is a part may initiate a limited-objective attack to relieve the pressure. A delaying position is not abandoned solely on the basis of a penetration unless it is of such a magnitude as to endanger the entire position.

*b.* At a preselected time or when the position becomes untenable, the brigade commander orders a withdrawal. If the position is tenable at the prescribed time for withdrawal and further delay will contribute to the intent of the operation, the brigade commander may inform higher command and retain his position.

*c.* As early as practicable, the brigade commander should effect liaison with elements to his rear and begin planning for withdrawing through the cover provided. Every effort will be made to insure that adequate gaps through the covering positions are provided to prevent massing of forces when the passage is executed.

## Section IV. RETIREMENT

### 139. General

A retirement is an operation in which forces move away from the enemy without direct pressure. A withdrawal from action becomes a retirement after the main force has disengaged from the enemy and march columns have been formed.

### 140. Conduct of the Retirement

A retirement is conducted in a formation appropriate to arteries of movement and the expected dispositions of forces at the destination with such security as is dictated by the situation. The operation may be conducted as an administrative move or a tactical move. The main body of the force is deployed in a manner inverse to that employed in a movement to contact. If the movement is not covered or if a threat from enemy forces is considered possible, the brigade will be deployed to meet the threat.

*a.* A retirement is most effectively accomplished on multiple routes. On most occasions after the brigade has passed through the covering force, road passage is on a priority basis, and arteries and time of use will be dictated.

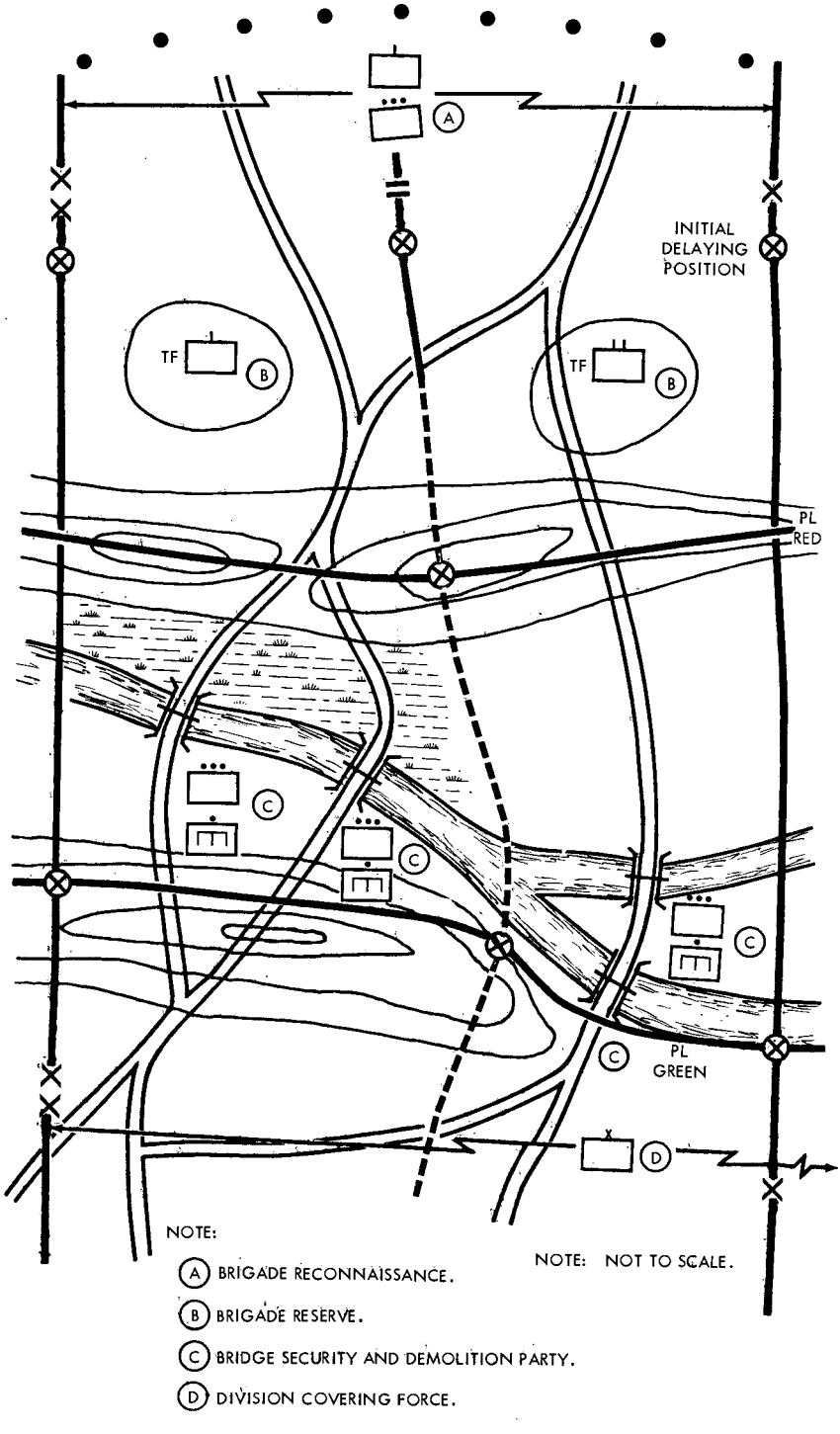



*Figure 17. Brigade in delay.*

*b.* The brigade commander may designate march objectives or require that subordinate elements do so based on his scheme of operation.

*c.* A retirement is best controlled by attaching smaller units to major subordinate elements to distribute forces over available road nets. Helicopters may be employed to assist in retirement over restricted terrain.

## Section V. RELIEF OPERATIONS

### 141. Purposes and Types

*a.* Conservation of fighting power, maintenance of effectiveness, and the tactical plan and changes to it may require the periodic relief of committed units. Under nuclear conditions, it may be necessary to replace company and battalion-size units whose combat effectiveness has been destroyed or greatly reduced by nuclear fire. Such reliefs are effected by a relief in place or a passage of lines.

*b.* The entire brigade may participate in a relief or a passage of lines, or it may direct and control any or all of these operations internally.

### 142. Considerations Affecting the Choice of Reliefs

*a. Relief in Place.* When sufficient time is available, the relief in place should be employed in those situations where:

(1) The unit being relieved is required in another area prior to or just after an operation is launched.

(2) The capability of the enemy is such that the troop density involved in a passage of lines constitutes an excessive risk.

(3) The attacker requires more detailed familiarity with the terrain and the enemy situation.

*b. Passage of Lines.* The passage of lines is preferred when—

(1) There is insufficient time to conduct a relief in place.

(2) More flexibility is desired in the selection of the formation for the operation.

(3) The fire support of two units is desired in a particular area.

(4) A major change in the direction of an operation is planned.

(5) It is desired to maintain continuous offensive pressure against the enemy.

*c. Rearward Movement.* The relieved element should, if at all possible, clear the rear boundary of the relieving unit prior to commencing lateral movement.

*d. Reference.* For a discussion on planning and executing relief operations, see FM 61–100.

# CHAPTER 7
# OTHER TACTICAL OPERATIONS

## Section I. GENERAL

### 143. Scope

*a.* The brigade has the capability of conducting tactical operations under any and all conditions although it may have to be augmented with special equipment and undergo specialized training for some.

*b.* Appendix I lists other manuals which cover in greater detail the tactical operations discussed in this chapter.

## Section II. JOINT AIRBORNE AND AIRMOBILE OPERATIONS

### 144. General

*a. Scope.* This section covers the broad aspects of joint airborne and airmobile operations in which the brigade may participate. Although the term "airborne" includes joint airborne and airmobile operations, as used in this manual airborne pertains to joint airborne operations only.

*b. Terms.* See figure 18.

### 145. Air Transportability of the Brigade Headquarters and Headquarters Company and Brigade Units

*a. The Airborne Brigade.* The airborne brigade headquarters and headquarters company (as well as all units of the airborne division normally attached to the brigade for operations) has been organized and equipped primarily to perform joint airborne assault landings. All of the equipment is air transportable in medium transport aircraft, and all except the organic aircraft can be delivered by parachute.

*b. The Infantry Brigade.* The infantry brigade headquarters and headquarters company's equipment is all transportable in medium and heavy transport aircraft. All equipment of units of the infantry division normally attached to or supporting the infantry brigade can be transported by air except the tanks, tank-recovery vehicles, and armored-vehicle-launched bridges.

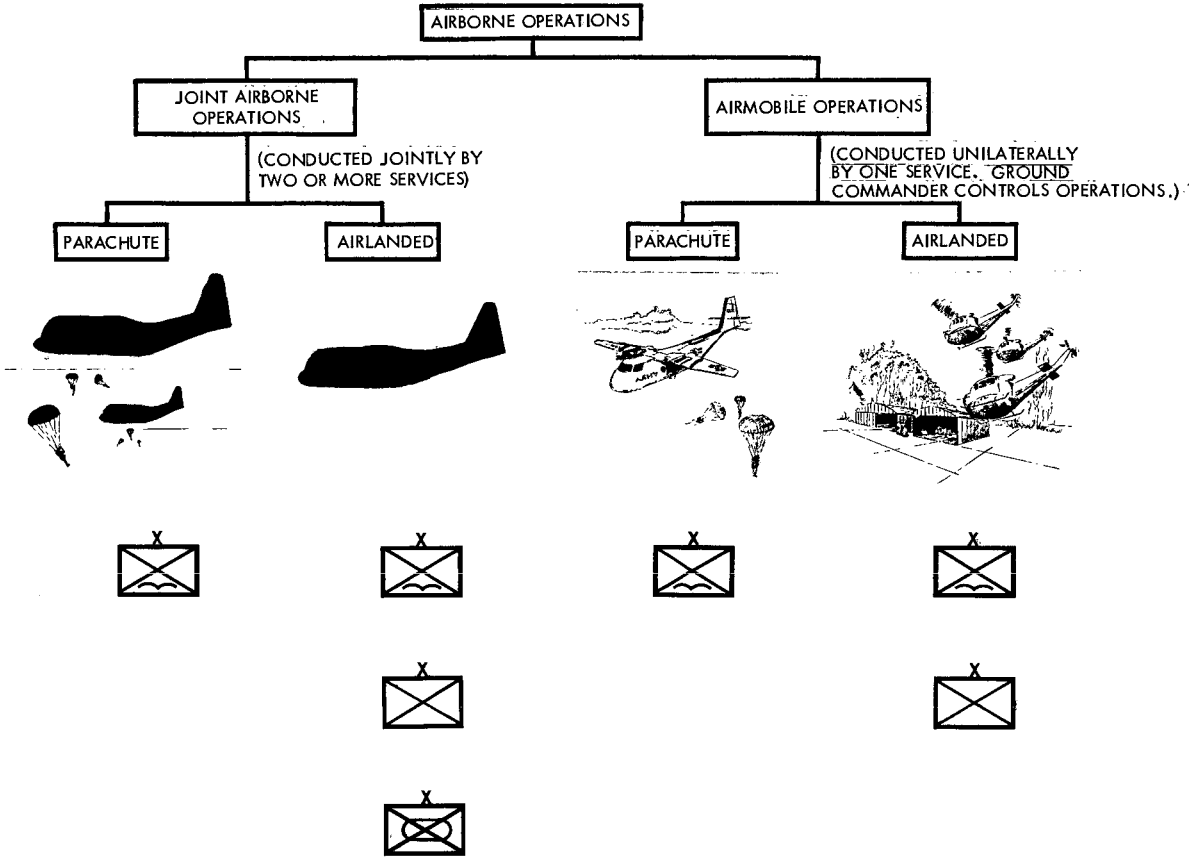



*Figure 18. Airborn operations.*

*c. The Mechanized Brigade.* The equipment of the mechanized brigade headquarters and headquarters company is air transportable. However, retention of the mechanized characteristics of the brigade in airmobile operations is not practicable.

## 146. Joint Airborne Operations

*a. Employment of the Brigade.* The brigade conducts joint airborne operations using all or part of the brigade as an independent army force or as part of a larger army force. Airborne operations, independent or semi-independent, may be conducted frequently by the airborne brigade, less frequently by the infantry brigade, and seldom by the mechanized brigade.

*b. Security.* From the initiation of planning to the completion of the operation, security is of paramount importance throughout all phases of airborne operations.

*c. Liaison.* The brigade establishes liaison as soon as it receives its warning order for an airborne operation. This liaison is established with army headquarters (if one is present) or the joint force headquarters, Air Force troop-carrier units, other supporting forces, and the linkup force.

*d. Planning.* (See FM 57–10.)

*e. Brigade Orders.*

(1) The brigade commander issues a warning order as soon as possible so subordinate unit commanders can make their plans and preparations concurrently. The warning order may include special security measures and advance information of the number and types of aircraft allocated to the battalion.

(2) Brigade plans and orders give battalion commanders the following additional information peculiar to an airborne operation:

(*a*) Assault objectives for the attached battalions and sectors of responsibility.

(*b*) The location and assignment of drop zones and/or landing areas.

(*c*) Requirements for special reports not covered by SOP.

(*d*) Coordinating instructions for initiating the ground phases of the operation.

(*e*) Data for the air movement plan to include location of loading areas and/or departure sites, allocation of aircraft, composition of aircraft serials, flight route diagrams, and the time for loading, takeoff, and arrival at the destination. Data for priority of move-

ment, phase back of units, and logistical support are also included.

(*f*) Data on marshaling including special security measures to insure secrecy.

(*g*) Details of air-sea rescue, when applicable.

(*h*) Details of time and place of arrival and the use of troops and equipment in the followup echelon, when applicable.

(*i*) Organization of, and instructions to, the rear echelon.

(*j*) The supply and medical support plan, including special measures for air resupply and air evacuation of patients.

(*k*) Air defense support for the operation.

*f. Brigade Reserve.* The initial reserve is usually small in order that the assault forces may have maximum combat power for accomplishing their missions. When assault tasks have been accomplished, additional forces may become available as reserves. The reserve is moved into the objective area as early as the ground situation and availability of aircraft permit. However, if the brigade elements are committed simultaneously in widely separated areas, the brigade reserve may be held in readiness in the departure area prepared for air drop or airlanding in the objective area.

*g. Conduct of the Joint Airborne Operation.*

(1) When marshaling has been completed, the air movement is made to the drop zones and landing areas. The movement is under the control of the troop-carrier commander. During this phase, the brigade commander relinquishes control of his unit and does not regain it until the landing has been made.

(2) Immediately upon landing, the brigade commander reorganizes by collecting equipment and assembling his attached battalions. Security elements move directly to the assigned areas and accomplish their mission. The brigade commander resumes control of his subordinate elements as rapidly as reorganization permits.

(3) The attack phase of the airborne operation is conducted as described in chapter 4.

*h. Combat Service Support.* Each assault battalion of the brigade takes elements of its combat trains with it. Elements of the brigade trains are phased into the objective area as soon as the tactical situation and availability of aircraft permit. Followup supplies are delivered as close as possible to battalions of

the brigade. As the objective area is consolidated and secured, the brigade trains assume normal functions.

*i. Defense of the Objective Area.* The defense of the objective area is conducted essentially as described in chapter 5. When the brigade must defend a large area, the brigade commander may organize his defense around strongpoints, generally of battalion size. Gaps between these strongpoints must be covered by fire and continuous surveillance of all types. Emphasis is placed on aggressive engagement of hostile aircraft with available automatic weapons in accordance with rules of engagement established by the brigade commander.

*j. Airborne Raids.* An airborne raid is an attack to accomplish a specific mission with no intention of holding the invaded area. The entire brigade may be used on a raid of extensive scale, or the brigade may conduct a raid using only a part of its attached forces. The mission of the raid may be to obtain information about the enemy, to capture or kill enemy personnel, to rescue or assist friendly units or personnel, to seize critical equipment or similar intelligence objectives, to destroy enemy installations, or to harass and disrupt the enemy. Withdrawal may be by air, or it may be overland or by sea or by a combination of these means.

## 147. Airmobile Operations

*a. Employment of the Brigade.* The infantry and airborne brigades conduct airmobile operations as a routine part of land combat. The force may range in size from a squad to the entire brigade. The mechanized brigade, less its heavy equipment, can conduct airmobile operations, but its use for this purpose is infrequent (FM 61–100).

*b. Basic Considerations.*

(1) Using the airlift capability organic to the division, the brigade can conduct company-size airmobile operations. Larger operations may require aircraft from corps or army.

(2) When authorized, an Army pathfinder detachment(s) augments the division to provide terminal guidance. Within the lifting unit specially trained guidance (unit terminal guidance) personnel may be used in airmobile operations when consistent with security aspects and especially at night or during periods of reduced visibility. Personnel from the units that routinely conduct airmobile operations are also trained for this purpose

and may be used in lieu of regular pathfinder detachments.

(3) When possible, routes flown by aircraft should avoid areas occupied by enemy forces. All means of intelligence are employed to determine the flight routes. Pathfinders are used to provide navigational assistance and air traffic control in the objective area.

(4) Airmobile operations normally are unsuited for the direct assault of heavily defended objectives.

(5) A daylight operation permits more effective air and artillery support than one conducted at night and facilitates assembly of troops and equipment. However, darkness aids tactical surprise and reduces the effectiveness of enemy fire.

*c. Planning Airmobile Operations.*

(1) The airmobile operations plan is developed in reverse sequence as follows (FM 57–35).

(*a*) Ground tactical plan.

(*b*) Landing plan.

(*c*) Air movement plan.

(*d*) Loading plan.

(2) Assembly areas may not be required when troops are airlanded on or near the objective area since, in most cases, unit integrity and control will be kept during both the air movement and the landing phase. Security forces, if used, land directly on their objective (or as near it as possible) to provide early security elements on the COP. See figure 19 for a schematic presentation of a brigade scheme of maneuver for an airmobile operation.

(3) The brigade retains a small reserve on airmobile operations in order to influence the conduct of the battle. The reserve may vary in size from a reinforced rifle company to a battalion task force, depending on the number of attached battalions in the brigade, the area to be defended, and the enemy threat. The reserve frequently moves into the objective area in the assault echelon, but seldom in the initial lift when availability of aircraft makes shuttle movement mandatory.

(4) Alternate plans are prepared to cover contingencies resulting when—

(*a*) Part of the force fails in its particular mission.

(*b*) Signal communication is disrupted.

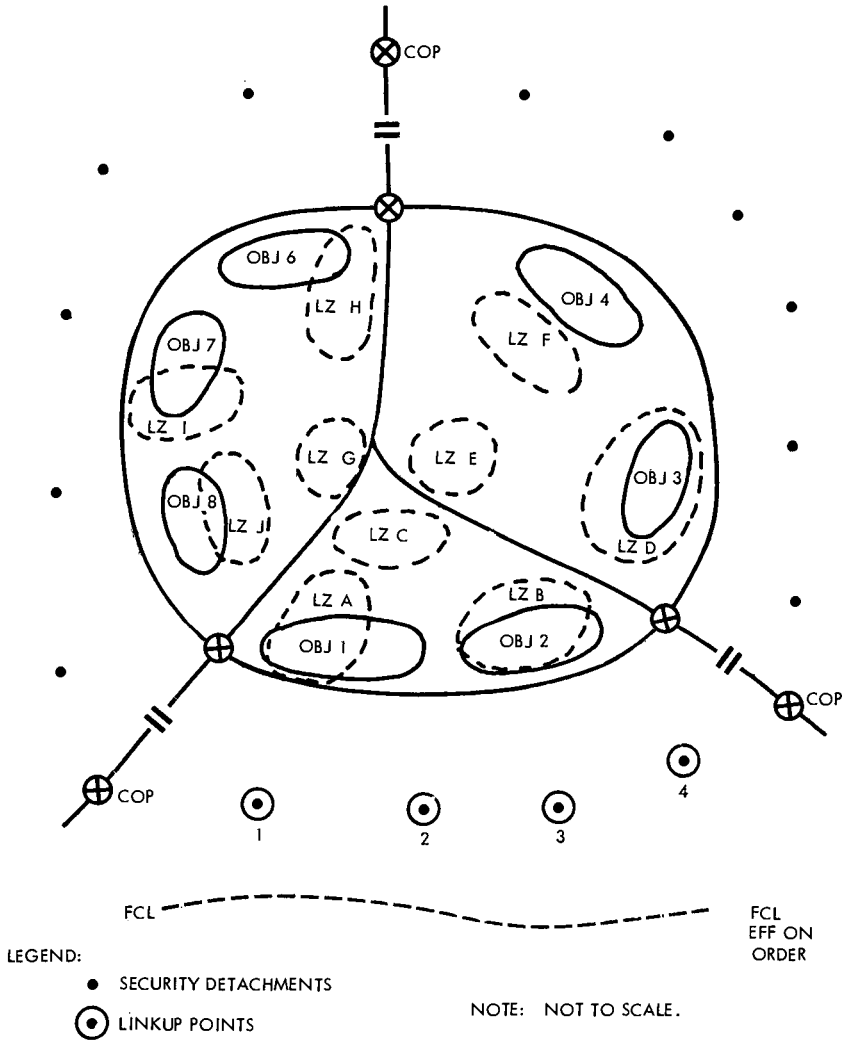



*Figure 19. Scheme of maneuver, airmobile operation.*

(*c*) Weather conditions or enemy action prevents the use of designated routes or landing areas or interferes with landings.

(*d*) Withdrawal from the objective area becomes necessary or desirable.

(5) Selection of the time of landing is influenced by—

(*a*) Mission of the brigade.

(*b*) Enemy situation and capabilities (air and ground).

(*c*) Forecasted weather to include ceiling and visibility.
(*d*) Availability of artillery, air, and nuclear fires.
(*e*) Availability of ground vehicles and aircraft.

*d. Conduct of an Airmobile Operation.*

(1) Control of the loading, takeoff, and movement of brigade units is decentralized, usually at battalion level. If the landing is observed and taken under fire by the enemy, the task force commander may decide to use alternate plans to avoid excessive losses of personnel and aircraft.

(2) Units reorganize quickly and conduct a ground attack to seize objectives in the area.

## 148. Withdrawal by Air

(fig. 20)

*a. General.*

(1) A withdrawal by air is an operation in which all or a part of the brigade disengages from the enemy and is moved by air to another location. The withdrawal may be forced by enemy action or it may be made voluntarily.

(2) All brigades have the capability of withdrawing by air. However, withdrawal of the mechanized brigade is limited to personnel and light equipment only.

(3) Local air superiority is desirable for a successful withdrawal by air during daylight periods, but a small force relatively close to the line of contact may withdraw without air superiority by taking advantage of darkness or other conditions of poor visibility.

(4) A force withdrawn by air may move to an assembly area behind friendly lines or directly to another battle area.

*b. Planning for the Withdrawal.*

(1) Brigade and subordinate units plan a withdrawal by air in as much detail as time permits. Brigade normally allocates available airlift to subordinate units. Brigade plans rely heavily on unit SOP to reduce the amount of details in orders.

(2) When an operation involves a high degree of risk and there is a probability that a withdrawal by air may be necessary, plans are made concurrently with the plan of operation.

(3) Commanders and staffs at brigade and battalion levels make as thorough a reconnaissance as possible consistent with time limitations and security.

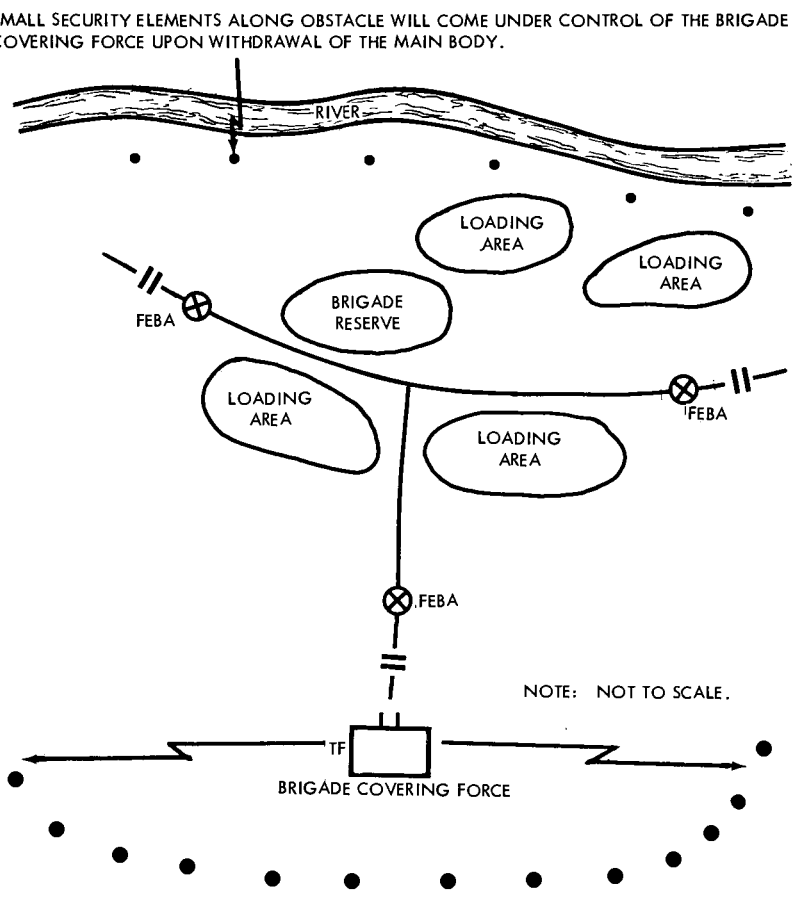



*Figure 20. Infantry brigade of four battalions in a withdrawal by air.*

*c. Conduct of the Withdrawal.*

(1) The brigade covering force takes over defense of the perimeter by replacing COP forces on their positions, by a relief in place, or (if the enemy situation permits and adequate space is available in the perimeter) by occupying positions through which elements of the brigade main body withdraw. The covering force may take over responsibility for the defense of the entire perimeter simultaneously, or this shift of responsibility may be time-phased with the air movement plan to permit units to remain in position and begin their withdrawal at the latest practicable time before their scheduled arrival in the loading area.

(2) Supporting fires, close air support, mines, and obstacles are exploited to prevent the enemy from pursuing the withdrawing force.

(3) During a night withdrawal, emphasis is placed on secrecy and the simulation of normal activity as long as possible.

(4) On arrival in the loading area, units complete preparations for loading and form into plane-load groups. Tactical loading may be sacrificed for speed and maximum use of the capacity of aircraft.

(5) As soon as the main body of the brigade completes its withdrawal, the covering force begins its withdrawal. The withdrawal of the covering force is under brigade control.

*d.* For further details of withdrawal by air, see FM 61–100.

## Section III. LINKUP OPERATIONS

### 149. General

A linkup involves the juncture of two ground forces. It may be conducted as a part of the following operations: joint airborne or airmobile operations; an attack to assist, or the breakout of, an encircled force; or an attack to join a force of infiltrators. The brigade may participate in linkup operations as a part of a larger force, or it may conduct operations within its own resources which require linkup.

### 150. Planning for Linkup

Planning for linkup must insure close coordination of the efforts of the linkup force and the force with which linkup is made (the stationary force). Plans are prepared and coordinated in advance and include the following:

*a.* The command relationship of forces involved in a linkup operation must be established prior to the operation to insure a clear delineation of responsibilities. The stationary force may be attached to the linkup force or the linkup force may be attached to the stationary force. In addition, both forces may come or remain under control of a higher commander. The headquarters directing the linkup establishes the command relationship, including the time or conditions under which command will be assumed.

*b.* Command and staff liaison is accomplished before and during the operation. Information and plans are exchanged early in the planning phase. As linkup becomes imminent, additional liaison personnel may be exchanged to insure coordination of fires and any changes in tactical plans; Army aviation may be used to facilitate this exchange.

*c.* A system of mutual recognition is devised to preclude the possibility of friendly troops firing on one another. This system may include pyrotechnics, arm bands, panels, vehicle markings, lights of a distinctive pattern and/or color, colored smoke, infrared and radar devices, arm-and-hand signals, and use of a password.

*d.* Communication plans are coordinated to include establishment of nets and exchange of call signs, authentication procedures, radio frequencies, SOI, SSI, and radio equipment if required.

*e.* Schemes of maneuver are exchanged to include current and planned location of friendly elements. Control measures are established in advance to include use of linkup points, boundaries, axis of advance, and delineation of objectives if appropriate. Linkup points are selected at easily recognizable points at which physical contact between the two forces is expected to occur. Sufficient linkup points are established to accommodate possible changes in the scheme of maneuver. Checkpoints and phase lines may also be used to determine by reference the location of one or both forces and thereby facilitate control.

*f.* Coordination of fires is accomplished by exchange of fire support plans and by use of control measures such as bomblines, no-fire lines, fire coordination lines, and nuclear safety lines.

*g.* Assistance from the stationary force is provided to the linkup force to facilitate linkup and reduce the time of passage through positions of the stationary force. Obstacles are removed (where appropriate) immediately prior to linkup, and lanes through barriers are opened. Guides provided by the stationary force assist in traffic control through and within the defense positions. The linkup force must be fully informed of all minefields and other obstacles in front of and within the stationary force defense sector.

*h.* Actions to be taken following linkup are established in advance. The linkup force may reinforce or assume the defense of the area, conduct a coordinated attack with the stationary force, or pass through or around the stationary force and continue the attack.

*i.* Alternate plans are considered in view of the possibility that the linkup force may be unable to reach the stationary force in the prescribed time. The plans should provide for fire support, close air support, and aerial resupply for the stationary force for such a contingency.

## 151. Combat Service Support

Combat service support requirements may be greater than those for an ordinary attack if the linkup force must anticipate and provide for the needs of the stationary force. Planning should provide for the possible use of aviation to perform such missions as resupply of the stationary force and evacuation of casualties.

## Section IV. AMPHIBIOUS OPERATIONS

## 152. General

The division is normally the smallest organization of combined arms and services employed as the landing force echelon for conduct of assault landings and execution of a scheme of maneuver ashore.

*a.* The brigade, when appropriately reinforced, may be organized and equipped to conduct amphibious operations. The brigade participates in an amphibious operation as the Army component or an element of it and conducts its operations within the principles, doctrine, and procedures for unified and joint operations (FM 5–144, FM 31–11, and FM 31–12).

*b.* The amphibious operation includes planning, embarkation of troops and equipment, rehearsals, movement to the objective area, final preparation of the objective, assault landing of troops and accompanying supplies and equipment, and support of the landing force until termination of the amphibious operation. An amphibious operation may include airmobile operations.

## 153. Types of Amphibious Operations

The brigade may participate in any of the following types of amphibious operations:

*a.* An amphibious assault to establish a landing force on a hostile shore to conduct further combat operations, to obtain a site for an advanced naval or air base, or to deny the use of an area or facilities to the enemy.

*b.* An amphibious withdrawal for the purpose of redeployment or evacuation.

*c.* An amphibious demonstration conducted to deceive the enemy by a show of force, with the expectation of deluding the enemy into a course of action unfavorable to him.

*d.* An amphibious raid involving a swift incursion into or a temporary occupancy of an objective, followed by a planned withdrawal. The purposes of such raids are to inflict loss or damage,

secure information, create a diversion, or capture or evacuate individuals and/or materiel.

### 154. Organization for Embarkation and Command Afloat

In amphibious operations, the division is organized as an embarkation group. The brigade will constitute an embarkation unit when part of the division or an embarkation group when operating as an independent army unit. Embarkation groups and units are formed to assist in the planning, preparation, and movement to the objective area and to integrate joint command and control facilities and multiple service resources.

### 155. Operations Ashore

The maneuver battalions of the brigade, appropriately reinforced, form the assault landing teams of the assault echelons of the force. The ground tactics during the operations ashore after the beachhead has been secured are substantially the same as for any ground operation.

## Section V. RIVER CROSSINGS

### 156. General

The purpose of a river crossing is to pass over the river obstacle as rapidly and efficiently as possible and continue an attack to destroy the enemy or seize an assigned objective which will protect the crossing of the remainder of the force. It is an offensive operation differing from other offensive actions primarily in the application of techniques. However, it usually requires specialized crossing equipment and trained personnel. For detailed considerations of river-crossing operations, see FM 31–60.

### 157. Types of River Crossings

Attacks of river lines are classified as hasty or deliberate. All crossings are initially planned as hasty crossings with contingent plans for a deliberate operation.

*a.* A crossing is termed "hasty" when it is conducted as a continuation of an attack by forces which advance to the river line and cross with a minimum loss of momentum. Since a hasty crossing is characterized by speed, surprise, and a minimum concentration of personnel and equipment, it is less vulnerable to enemy counteraction. Once a hasty crossing is effected at one or more sites, all forces are employed over the obstacle to build up forces in the bridgehead area.

*b.* A deliberate crossing is characterized by some delay, more detailed preparation and planning at all levels, and the buildup and employment of extensive and specialized river crossing means. A deliberate crossing also entails neutralization of enemy positions in the zone of attack on the far shore.

## 158. Reconnaissance

Detailed information of the enemy situation and the nature of the river is essential. Since even small enemy forces can seriously interfere with a crossing, the commander executing the operation should have detailed knowledge of the location of any enemy force that can place observed fire on the river. The location of enemy reserves also assumes great importance because of the initial vulnerability of the crossing force to counterattack, especially by armor. Reconnaissance is therefore directed toward locating these enemy units so their effectiveness may be reduced by nuclear and/or nonnuclear fires at the time of attack. Employing Army aircraft for radar, visual, and photographic reconnaissance is a fast and effective means of obtaining information of the enemy and area of operations.

## 159. Planning the River Crossing

Considerations for planning a river crossing are essentially the same as those discussed in planning for an attack in chapter 4. However, additional emphasis is required in certain areas as indicated below.

*a.* Planning must provide for speed of operations, maximum dispersion, and the seizure of deep objectives. If carriers and/or aircraft are available in quantity, it may be possible to achieve all of these aims. If crossing means are limited to boats and footbridges (resulting initially in a lack of mobility on the far bank), closer objectives may have to be seized, and the initial concept may have to be based on seizing and protecting a limited bridgehead until bridges and ferries suitable for carrying heavy equipment can be built. Smoke may be used to deny the enemy observation and the ability to visually adjust fires on crossing areas. Deception measures, including the use of dummy smoke screens, may be used to confuse the enemy as to the exact crossing sites.

*b.* While every attempt must be made to seize intact bridges over rivers which form major obstacles in a unit's zone or to traverse them in hasty crossings, planning to make deliberate crossings over them should begin as early as practicable. Long range planning for deliberate crossings over major rivers is

usually initiated by division or higher levels, and the brigade begins its planning as soon as it becomes apparent that the brigade may be employed in the crossing.

*c.* The following are desirable characteristics for a crossing site, regardless of whether the crossing is made by vehicle or boat.

(1) A far shore that is undefended or lightly held. However, a strongly held position may be neutralized or destroyed with fires to obtain a desirable crossing site.
(2) Terrain on the near and far bank which facilitates rapid movement forward and early seizure of key terrain features.
(3) A moderate river current (not over 6.6 kilometers per hour for M113).
(4) An unobstructed water area.
(5) Suitable banks for entry and exit.
(6) Sites suitable for ferries and bridges to carry tanks and other heavy equipment.
(7) A bend in the river line toward the attacker in areas where nuclear weapons are not available to neutralize enemy river defenses.
(8) Dominating terrain including observation and fields of fire on the near bank superior to that of the far bank.
(9) A narrow crossing site to facilitate use of armored vehicle launched bridges (AVLB) if available.
(10) Covered approaches, assembly areas, and attack positions.

*d.* A time of attack is selected, if possible, that allows units to move forward in darkness but reach the far bank at daybreak. Care should be taken that repeated use of dawn attacks does not eliminate surprise.

*e.* Surprise is essential in a river crossing operation. Assault units should be able to reach the far bank and launch their attacks without major enemy interference. Feints and demonstrations are used to draw the enemy away from attack points and permit the assault units to get a firm foothold on the far bank.

## 160. Fire Support

The fire support plan is designed to permit an uninterrupted movement across the river and far enough forward to allow units to obtain dispersion. If available, nuclear weapons are

placed on the far bank to neutralize or destroy enemy forces that can interfere with the crossing. Enemy reserves that can interfere with the crossing are taken under fire. Smoke is planned against enemy observation posts. In the early stages of the attack, tanks may provide overwatching fire to facilitate the crossing. Supporting weapons displace across the river early enough to insure continuous support to the attacking units.

## 161. Conduct of a River Crossing

*a.* Units move from positions well in rear of the river to the near edge, which is the line of departure. Every effort is made to maintain a continuous flow of personnel with no appreciable stopping on the near bank. Crossing of the river is as rapid as possible.

*b.* Whenever possible, a crossing is accomplished on a broad front to facilitate dispersion. However, crossing sites are usually limited in number, resulting in the concentration of attacking forces. Plans must, therefore, include provisions for control of forces on the near bank and rapid dispersion on the far bank, both in width and depth, to avoid presenting a lucrative target to enemy fires. Airmobile forces may be employed in conjunction with a river crossing to seize crossing areas or crossing sites. Units do not attempt extensive reorganization on reaching the far bank, but move rapidly away from the river to eliminate remaining enemy and to gain dispersion. As the attack progresses, reorganization is continuous until eventually the units are reconstituted in the formation necessary to continue the attack. The attack then proceeds as described in chapter 4.

*c.* The reserves remain on the near bank until sufficient ground has been gained on the far bank for their employment. They are prepared to move to the far bank quickly if the enemy's countermeasures threaten the success of the operation. The brigade reserve may be a tank-heavy task force, provided means are available for crossing which can be used to exploit any success on the far bank and to seize deep objectives required to expand and secure the bridgehead.

*d.* All available crossing means are used to achieve maximum speed in the crossing and the subsequent exploitation of the bridgehead and to reduce the criticality of any one crossing means. Army aircraft, particularly helicopters, are capable of moving fire support units, reserves, and supplies to speed the buildup on the far bank.

## Section VI. RAIDS

### 162. General

*a.* Raids may be conducted by any size force. The brigade may be ordered by higher headquarters to conduct raids or the brigade commander may conduct them on his own initiative. It is desirable for the force to be highly mobile and to be composed of all arms. A task force with the battalion as its nucleus is particularly suitable for a brigade raiding force.

*b.* Since permanent retention of terrain in the enemy area is not contemplated, a raiding force plan of withdrawal must be made in advance. Easily identified rallying points should be designated for use in case unforeseen situations do not permit the original plan of withdrawal to be executed.

*c.* For details on raids, feints, demonstrations and ruses see FM 61–100.

## Section VII. COMBAT IN FORTIFIED AND BUILT-UP AREAS

### 163. Combat in Fortified Areas

Whenever possible, fortified positions are contained by minimum forces while the main force continues the advance to seize more distant and decisive objectives. Reduction of a fortified area may include a direct assault, siege, or an attack from the rear (FM 31–50).

### 164. Combat in Built-up Areas

*a. Attack.*

(1) When possible, built-up areas are isolated and bypassed. In the event the area must be assaulted, terrain dominating approaches to it is seized to isolate the area. Highly mobile forces, to include airmobile elements, are desirable for this action. An assault of a built-up area is closely controlled and includes designation of objectives that divide enemy defenses.

(2) The advantages gained through the use of nuclear weapons and intense nonnuclear bombardments must be weighed against the creation of obstacles to the assault elements. Chemical weapons may be used to inflict casualties without creating obstacles.

(3) Measures to control or evacuate the civilian population are essential.

*b. Defense.*

(1) To be suitable as a defended area, a built-up area must be located so that it forces the enemy to launch a direct attack or make a time consuming maneuver. The obstacle effect of built-up areas may permit their defense in lesser strength, thus providing economy-of-force. Under some conditions, elements of the brigade may hold towns while the remainder of the brigade counterattacks in the open.

(2) The defense of a built-up area is organized around key terrain features and key portions of the built-up area which preserve the integrity of the defense and provide ease of movement to the defender. Subterranean systems may facilitate the movement of forces and provide protection against nuclear attack. They are incorporated in the organizations of the defense. Maximum use is made of rubble and other obstacles. Defenses are prepared in depth to facilitate continuous defense throughout the area.

(3) Plans should provide for the control and evacuation of the civilian population and the use of friendly elements in the preparation of defensive positions.

## Section VIII. PASSAGE OF DEFILES

### 165. General

A defile is any terrain feature, natural or artificial, which tends to constrict the passage of troops. Therefore, a mountain pass, a gap through a minefield, a river-crossing site, a bridge, or an area between two radiated areas are all defiles. The reconnaissance of defiles must consider all possible routes. Planning for an alternate route is essential. Major engineer effort required to prepare a defile for passage should be conducted preferably at night or under conditions of low visibility. Traffic control points must insure that the flow of vehicles is maintained constantly (without halts or groupings) and directly into the defile target area or into the designated dispersed holding areas on a scheduled plan. Units plan in advance to move directly into a holding area or the attack position upon clearance of the defile target area. Since a defile is a prime enemy target, deception will serve to hide the real intentions and insure successful passage (fig. 21).

## 166. Tactical Considerations

*a.* When the brigade must pass through a defile, reconnaissance elements precede the main body. If the immediate area is clear, maneuver units (preferably tanks and mechanized infantry) are dispatched through the defile and establish a defense, securing enough terrain to permit the main body to deploy upon passage of the defile. Movement of the brigade through the defile should be planned so that vulnerability to chemical or nuclear attack is minimized. Maximum use is made of available aircraft for reconnaissance and surveillance.

*b.* Traffic control must be absolute. One individual with intimate knowledge of the defile and its approaches must be designated by the commander as the defile target area coordinator and made completely responsible for planning and regulating its passage. This individual is preferably the S3 who has paramount interest, although the commander may designate the engineer or his military police officer upon occasion. One of the coordinator's primary functions is to insure continually that the defile target area is maintained free of all unessential personnel and equipment. Regardless of the individual so designated, competent assistants (preferably trained MP) must be posted at all critical points to insure the uninterrupted flow of traffic. Route locations

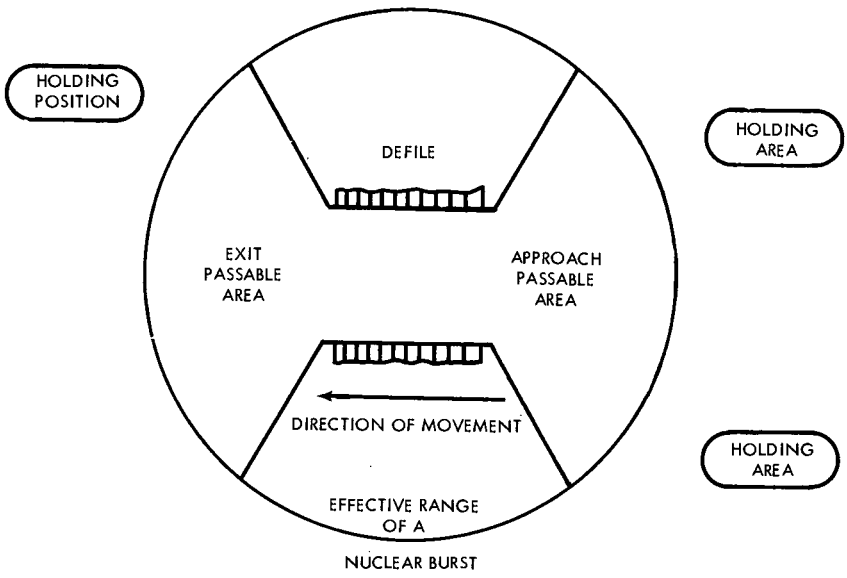



*Figure 21. Defile target area.*

which may cause accidents or halt traffic must be predetermined and wreckers positioned to clear the routes in any emergency.

## Section IX. THE BRIGADE IN COUNTERINSURGENCY OPERATIONS

### 167. General

*a.* In counterinsurgency operations the brigade may be employed as a subordinate element of the division or, with appropriate augmentation, as an independent combat force or in an advisory training role to support and assist receiving state forces. A brigade may be designated in contingency plans as a backup force for counterinsurgency operations. A brigade so designated will be area-oriented, partially language-qualified, and will receive special training in counterinsurgency operations with emphasis on civic action, psychological operations, police-type operations, and on the tactics and techniques of counter-guerrilla operations.

*b.* While most of the tactics and techniques discussed in this manual are generally applicable to counterinsurgency operations, there are additional considerations imposed upon all forces operating in counterinsurgency operational environments.

(1) In combat operations against insurgent forces, the employment of fire support and maneuver must be conditioned by the requirement not to harm the population.
(2) Police-type operations may be accentuated.
(3) The obvious indications of victory, i.e., enemy killed, weapons captured, terrain taken, will be absent, whereas the indications of defeat, i.e., friendly killed and wounded, weapons and equipment lost, will be evident.
(4) Morale problems incident to conditions described in (3) above and to fighting an elusive, hard-to-identify enemy in a foreign land, restricted by considerations for the safety of the population, preservation of property, and the psychological impact of operations will be major considerations.

### 168. The Advisory Training Role of the Brigade

When insurgency in a friendly foreign country reaches serious proportions, U.S. military assistance programs will be augmented and expanded in order to strengthen the receiving state's military capability to combat insurgency. Efforts of the U.S. military will be expanded to include increased assistance in the form of small unit advisors, instructor personnel, training units and

necessary equipment. The brigade, and particularly that brigade designated as a backup force, may provide mobile training teams (MTT) of advisory and training personnel to small units up through brigades, training, advice, assistance in infantry tactics and in the use of infantry weapons. Though the brigade may serve only as a source of MTT to be attached, as required, to MAAG and Missions, the entire brigade may be deployed to a receiving state as a "task force" to provide advice and training to receiving state forces.

## 169. The Brigade in a Combat Role

When insurgency has become primarily a war of movement between the organized forces of the insurgents and those of the established government, U.S. tactical forces may be requested by the receiving state to operate with their forces in a coordinated military campaign. Any brigade, but especially the brigade designated as a backup force, may be called upon to assume a combat role. In such a role the brigade will participate in counterguerrilla operations and in military civic actions. For a discussion of counterguerrilla operations, refer to FM 31–16.

# APPENDIX I

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| AR 59–106 | Operation of Air Force Terminals |
| AR 320–5 | Dictionary of United States Army Terms |
| AR 320–50 | Authorized Abbreviations and Brevity Codes |
| AR 345–5 | Personnel Management, Personnel Records |
| AR 600–30 | Character Guidance Program |
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| FM 3–12 | Operational Aspects of Radiological Defense |
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| FM 20–60 | Battlefield Illumination |
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| FM 22–100 | Military Leadership |
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| FM 30–5 | Combat Intelligence |
| FM 30–9 | Military Intelligence Battalion, Field Army |

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*NG:* State AG (3); units—same as Active Army except allowance is three (3) copies to each unit.

*USAR:* Same as Active Army, except one copy to each unit.

For explanation of abbreviations used, see AR 320–50.

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